

COUNTY COUNCIL OF DUNBARTON.



ANNUAL REPORTS

BY

THOMAS LAUDER THOMSON, M.D., D.P.H.,
MEDICAL OFFICER OF HEALTH,

AND

THE DISTRICT SANITARY INSPECTORS

FOR

THE YEAR 1928.

GLASGOW :

WILLIAM HODGE & CO., LTD., 34-36 NORTH FREDERICK STREET.
1929.

COUNTY OF DUNBARTON.

LIST OF STAFF.

County Medical Officer.

THOMAS LAUDER THOMSON, M.D., D.P.H.

Assistant County Medical Officer.

EDWARD NEIL REID, M.A., B.Sc., M.B., D.P.H.

County Sanitary Inspectors.

THOMAS ALLAN (Western District).

JOHN D. M'KENDRICK (Eastern District).

County Veterinary Inspector.¹

JAMES M'DOUGALL, M.R.C.V.S.

Clerks.

GEORGE S. BROWNE.²

AGNES M'M. KENNEDY.²

JESSIE G. S. SMALL.

MARION M. MACDONALD.³

BENJAMIN MCPHEE.⁴

County Analysts.

Messrs. TATLOCK & THOMSON, Bath Street, Glasgow.

¹ Also Veterinary Inspector for certain burghs.

² Part time with Education Authority.

³ Veterinary Inspector's Clerk.

⁴ Commenced duty 22nd October, 1928.

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*To the Department of Health for Scotland and
the County Council and District Committees
of Dunbartonshire.*

GENTLEMEN,

I beg to submit the Annual Report on the Health and Sanitary condition of the County for the year 1928.

The arrangements for the reorganisation of the Health Work which came into force in April, 1927, have worked smoothly during the year.

I have again included the Veterinary Inspector's Reports to the District Committees, and also the reports of work done by the District Engineer so far as they affect the Health Department.

The only changes in the staff during the year were as follows:—Frederick Murray took the place of William Strain, Assistant Sanitary Inspector at Alexandria, who was appointed Assistant in the Ayr District of Ayrshire. William Wiseman, Assistant in the Engineer's Department, was transferred to the Road Surveyor's Department, and his place was taken by Douglas Short. Benjamin M'Phee was appointed apprentice Clerk and Laboratory Assistant in the Medical Officer's Department at Dumbarton.

I have to record with regret the absence during a part of the year of P. J. C. M'Kenzie, Assistant Sanitary Inspector at 24 George Square, owing to serious illness. Mr. M'Kenzie was still off duty at the end of the year. It is also with regret that I have to record the absence from duty of Charles Watson, apprentice Clerk in the Alexandria Office, on account of acute illness from which his death occurred in February, 1929.

As regards the Report now submitted, it will be noted that considerable advance has been made in abolishing the worst slum properties in both Districts. This is referred to in the section relating to Housing. It will also be seen that there has been continued progress in the work of getting the dairy farms into a more satisfactory condition. This work is slow but steady.

The Sanitary Inspectors' and Engineer's Reports give the details of work done in their departments during the year.

I am,

Gentlemen,

Your obedient servant,

THOMAS LAUDER THOMSON.

HEALTH OFFICE,
88 COLLEGE STREET, DUMBARTON.

STATISTICAL SUMMARY FOR THE COUNTY AND DISTRICTS.

1928.

Acreage,	-	-	-	-	-	-	-	150,267
Western District,	-	-	-	-	-	-	111,525	
Eastern District,	-	-	-	-	-	-	38,742	
Population as estimated at the middle of 1928,								53,812
Western District,	-	-	-	-	-	-	30,625	
Eastern District,	-	-	-	-	-	-	23,187	
Density of the population per acre,	-	-						·35
Western District,	-	-	-	-	-	-	·27	
Eastern District,	-	-	-	-	-	-	·59	
Death-rate,	-	-	-					12·8
Western District,				-	-	-	12·7	
Eastern District,	-	-	-	-	-	-	13·0	
Birth-rate,	-	-	-	-	-	-		17·8
Western District,				-	-	-	16·1	
Eastern District,	-	-	-	-	-	-	20·5	
Infantile Mortality,			-	-	-	-		85
Western District,	-	-		-	-	-	93	
Eastern District,	-	-	-	-	-	-	78	



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MEDICAL OFFICER'S REPORT

FOR YEAR 1928.

PART I.—THE COUNTY.

VITAL STATISTICS.

POPULATION.—According to the estimation made by the Registrar-General, the population of the County at the middle of 1928 amounted to 53,812, or 212 less than last year. The estimate made up in the usual way from the Valuation Roll shows a population of 56,994, being an increase of 96 over the previous year, and 3182 more than the estimate by the Registrar-General.

BIRTHS AND BIRTH-RATES.—The County birth-rate continues to fall. Last year the number of births, after allowing for transfers, was 978, while in 1928 the number was 969. This figure is the lowest recorded, and gives a birth-rate of 17·8. Table III. shows the rates for the last five years.

DEATHS AND DEATH-RATES.—The number of deaths allocated to the County, after allowing for transfers, was 691 as against 670 in 1927. The rate for the County was, therefore, slightly higher than in last year, the rate for 1928 being 12·8. Table IV. shows the rates for the last five years.

INFANTILE MORTALITY.—During 1928 there were 83 deaths of children under one year as against 82 in the previous year. The rates in the Eastern and Western Districts were practically unchanged. The infantile mortality rate for the County was 85 as against 83 in 1927.

TABLE I.

SHOWING POPULATION AT CENSAL AND INTERCENSAL PERIODS SINCE 1891. CENSUS FIGURES IN DARK TYPE.

YEAR.	WESTERN DISTRICT.	EASTERN DISTRICT.	REMARKS.
1891	28,730*	20,314	* 949 navvies working on West Highland Railway.
1892	28,959	20,383	
1893	29,559	20,356	
1894	28,017*	22,477†	* Only 70 navvies working.
1895	28,556	23,204	
1896	29,005	23,186	† 500 navvies working in District.
1897	29,232	23,398	
1898	29,472	23,888	
1899	28,887*	24,085	* Extension of Dumbar-ton Burgh.
1900	28,748	24,102	
1901	26,952	23,784	
1902	27,331	24,395	
1903	27,607	25,965	
1904	27,487	26,695	
1905	27,860	29,645	
1906	28,380	33,370	
1907	29,140	25,700†	† Extension of Clyde-bank Burgh.
1908	29,550	26,170	
1909	29,085	26,705	
1910	28,830	27,000	
1911	28,092	26,350	
1912	28,514	26,703	
1913	27,347†	22,560††	† Extension of Glasgow Boundaries.
1914	27,111†	22,543†	† Estimation by Registrar-General.
1915	27,238†	22,830†	
1916	27,195†	22,970†	
1917	27,302†	23,239†	
1918	27,452†	23,542†	
1919	27,364†	23,641†	
1920	27,318†	23,773†	
1921	30,340	23,808	
1922	31,049†	24,294††	† Extension of Milngavie Boundaries.
1923	30,281†	23,624†	
1924	29,872†	23,242†	
1925	30,660†	23,789††	† Extension of Clyde-bank Boundaries.
1926	30,789†	23,438*†	
1927	30,710†	23,314†	* Extension of Glasgow Boundaries.
1928	30,625†	23,187†	

TABLE II.

COUNTY OF DUNBARTON (LANDWARD)—ESTIMATED
POPULATIONS, 1928.

WESTERN DISTRICT.

PARISH.	Census Population, 1921.	Persons per Occupied House, 1921.	Occupied Houses as per Valuation Roll, 1928-29.	Estimated Population to middle of 1928.
Dunbarton, - -	176	4·757	37	176
Cardross, - -	6,719	4·688	1,474	6,910
Bonhill, - -	16,622	4·246	3,927	16,674
Kilmaronock, - -	873	4·365	207	904
Rhu, - -	3,062	5·252	622	3,267
Rosneath, - -	1,323	4·725	285	1,346
Luss, - -	670	4·653	144	670
Arrochar, - -	896	5·003	182	911
Total of Western District,	30,341	4·482	6,878	30,858

EASTERN DISTRICT.

Cumbernauld, - -	5,261	4·603	1,108	5,100
Kirkintilloch, - -	4,562	6·407	907	5,811
East Kilpatrick, - -	5,623	4·263	1,422	6,062
West Kilpatrick, - -	8,362	4·913	1,865	9,163
Total of Eastern District,	23,808	4·883	5,302	26,136
Total of County (Landward),	54,149	4·650	12,180	56,994

DEATHS FROM INFECTIOUS DISEASES.—Measles accounted for no fewer than 13 deaths, while Whooping Cough was responsible for 11. Otherwise the numbers of deaths were few; Scarlet Fever, 2; Diphtheria, 3; Encephalitis Lethargica, 4; Cerebro-spinal Meningitis, 1. The Deaths from Measles and Whooping Cough were caused by complications such as pneumonia. The statement of cases of infectious disease will be found in Tables XI. and XXVI.

DEATHS FROM INFLUENZA.—Twenty-one deaths were caused by Influenza as against 14 in 1927. The disease was somewhat prevalent in the early part of the year.

DEATHS FROM PNEUMONIA.—Forty-five deaths were due to this disease during 1928. These deaths were all due to Pneumonia uncomplicated with infectious disease. The number notified in 1927 was 65.

DEATHS FROM CANCER.—Deaths from this cause are steadily increasing year by year. In 1928 no fewer than 87 were registered; in 1927 the number was 60. Of the deaths recorded, 48 were from the Western District and 39 from the Eastern District.

DEATHS FROM TUBERCULOSIS.—During the year 1928 there were 20 deaths from Pulmonary Tuberculosis, giving a death-rate of $\cdot 37$ for the County. This figure is much the same as that of last year, and compares favourably with the general rate of mortality. The average for the previous five years is $\cdot 54$, and the rate for the whole of Scotland $\cdot 68$.

Sixteen deaths were caused by Non-Pulmonary Tuberculosis, giving a death-rate of $\cdot 30$, which is the same as last year. The preceding quinquennial rate was $\cdot 35$. The annual rate for the whole of Scotland for 1928 was $\cdot 29$.

The total County death-rate from Tuberculosis was therefore $\cdot 67$.

Table VI. gives the corresponding figures for all years since 1891.

TUBERCULOSIS.

PULMONARY TUBERCULOSIS.—Fifty-two cases (30 males and 22 females) were notified during 1928, as against 56 cases in 1927 and 54 cases in 1926. Of this number, 12 had died before the end of the year; 4 had left the district, and in 9 cases the diagnosis was not verified; 24 of the notified cases were sent for institutional treatment, and 2 received domiciliary treatment. It should be noted that the total of 52

TABLE III.—BIRTHS AND BIRTH-RATES PER 1000 OF POPULATION WITHIN THE COUNTY OF
DUNBARTON, EXCLUSIVE OF BURGHS, 1924-1928.

DISTRICT.	1924.			1925.			1926.			1927.			1928.		
	Births.	Birth- Rates.	Births.	Births.	Birth- Rates.	Births.	Birth- Rates.	Births.	Birth- Rates.	Births.	Birth- Rates.	Births.	Birth- Rates.	Births.	Birth- Rates.
Eastern,	436	18·8	496	20·8	519	22·1	458	19·6	476	20·5					
Western,	580	19·4	557	18·2	508	16·5	520	16·9	493	16·1					
County,	1016	19·0	1053	19·3	1027	18·9	978	18·1	969	17·8					

TABLE IV.—DEATHS AND DEATH-RATES PER 1000 OF POPULATION FROM ALL CAUSES IN THE
COUNTY OF DUNBARTON, EXCLUSIVE OF BURGHS, 1924-1928.

DISTRICT.	1924.		1925.		1926.		1927.		1928.	
	Deaths.	Death-Rates.	Deaths.	Death-Rates.	Deaths.	Death-Rates.	Deaths.	Death-Rates.	Deaths.	Death-Rates.
Eastern, 	307	13.2	265	11.1	239	10.2	281	12.1	301	13.0
Western, 	383	12.8	404	13.2	361	11.7	389	12.7	390	12.7
County, 	690	13.0	669	12.3	600	11.4	670	12.4	691	12.8

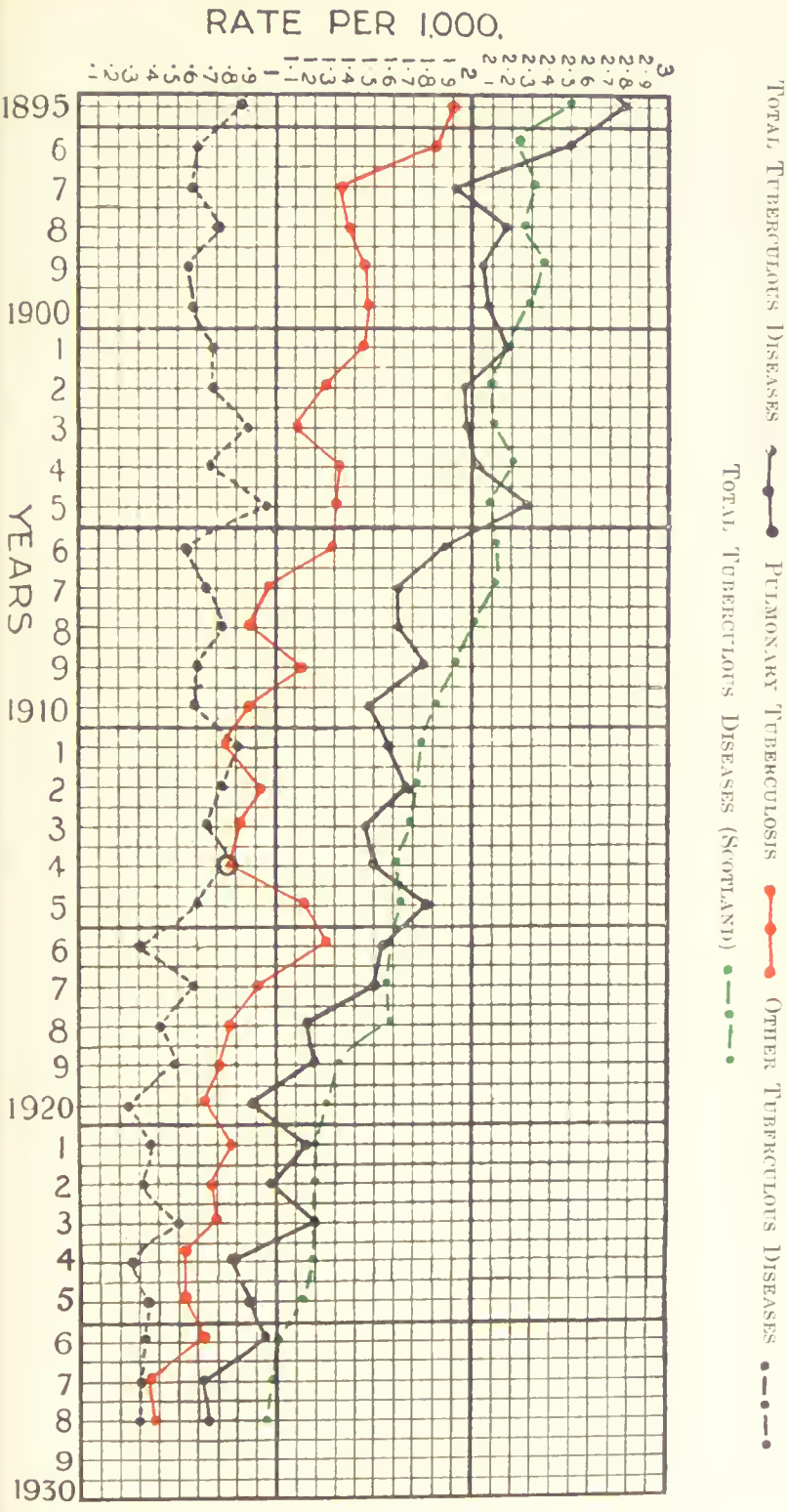
TABLE V.—BIRTHS AND BIRTH-RATES AND DEATHS
UNDER 1 YEAR PER 1000 BIRTHS, 1891-1928.

WESTERN DISTRICT.				EASTERN DISTRICT.				
Year.	No. of Births.	Birth-rate.	Deaths under One Year per 1000 Births.		No. of Births.	Birth-rate.	Deaths under One Year per 1000 Births.	
1891	815	28.257	110	108	693	35.017	153	119
2	809	27.16	95		710	33.94	85	
3	779	26.35	121		764	37.53	112	
4	704	25.127	96		763	35.145	129	
5	728	25.494	119		783	35.063	117	
6	754	25.995	98	109	801	35.829	104	109
7	787	26.923	144		787	34.882	101	
8	753	25.550	115		749	32.509	126	
9	738	25.548	112		758	32.643	104	
1900	828	28.803	77		706	30.473	112	
1	737	27.208	118	108	788	33.389	119	105
2	647	23.672	100		793	32.505	111	
3	673	24.377	104		843	32.466	92	
4	667	24.265	91		781	29.256	96	
5	645	23.151	125		907	31.844	106	
6	706	24.876	124	96	1013	31.424	107	93
7	709	24.365	89		694	28.343	90	
8	692	23.417	95		761	29.079	93	
9	653	22.454	75		732	27.410	80	
1910	608	21.089	95		710	26.296	94	
11	642	22.830	101	98	692	26.084	104	106
12	651	22.831	73		698	26.139	100	
13	653	23.9	92		580	25.7	102	
14	730	26.9	95		607	26.9	107	
15	673	24.7	128		554	24.3	119	
16	617	22.7	97	90	595	25.9	106	89
17	635	23.3	93		502	21.6	96	
18	599	21.8	92		469	19.9	98	
19	597	21.8	87		518	21.9	91	
1920	772	28.3	85		615	25.9	54	
21	704	23.2	48	71	551	23.1	74	82
22	675	21.7	76		557	22.9	86	
23	592	19.6	83		458	19.4	68	
24	580	19.4	74		436	18.8	108	
25	557	18.2	72		496	20.8	73	
26	508	16.5	67		519	22.1	58	
27	520	16.9	90		458	19.6	76	
28	493	16.1	93		476	20.5	78	

TABLE VI.—MORTALITY IN THE COUNTY (LANDWARD)
FROM TUBERCULOUS DISEASES, 1891-1928.

Year.	Pulmonary Tuberculosis.	Other Tuberculous Diseases.	Total.	Death-rates per 1000.			
				Pulmonary Tuberculosis.	Other Tuberculous Diseases.	Total.	
1891,	-	90	41	131	1·850	0·843	2·693
1892,	-	72	44	116	1·419	0·867	2·286
1893,	-	81	42	123	1·622	0·841	2·463
1894,	-	82	45	127	1·649	0·912	2·561
1895,	-	99	42	141	1·945	0·825	2·770
1896,	-	96	31	127	1·869	0·603	2·472
1897,	-	69	30	99	1·329	0·578	1·907
1898,	-	72	43	115	1·371	0·818	2·189
1899,	-	77	30	107	1·477	0·575	2·052
1900,	-	78	31	109	1·502	0·595	2·097
1901,	-	75	35	110	1·477	0·690	2·167
1902,	-	67	36	103	1·293	0·695	1·988
1903,	-	60	46	106	1·123	0·872	1·995
1904,	-	71	37	108	1·336	0·696	2·032
1905,	-	74	53	127	1·313	0·942	2·255
1906,	-	80	35	115	1·319	0·580	1·899
1907,	-	52	36	88	0·969	0·640	1·640
1908,	-	50	41	91	0·879	0·735	1·614
1909,	-	63	34	97	1·129	0·609	1·738
1910,	-	50	33	83	0·895	0·591	1·486
1911,	-	41	44	85	0·753	0·808	1·561
1912,	-	50	40	90	0·905	0·724	1·629
1913,	-	39	33	72	0·800	0·650	1·450
1914,	-	40	32	72	0·75	0·75	1·50
1915,	-	57	29	86	1·15	0·60	1·75
1916,	-	64	15	79	1·25	0·30	1·55
1917,	-	46	32	78	0·90	0·60	1·50
1918,	-	40	18	58	0·75	0·40	1·15
1919,	-	35	25	60	0·70	0·49	1·19
1920,	-	32	13	45	0·62	0·25	0·88
1921,	-	43	19	62	0·79	0·35	1·14
1922,	-	37	17	54	0·67	0·30	0·97
1923,	-	38	29	67	0·70	0·50	1·20
1924,	-	27	15	42	0·51	0·28	0·79
1925,	-	29	19	48	0·53	0·35	0·88
1926,	-	34	17	51	0·63	0·31	0·94
1927,	-	18	16	34	0·33	0·29	0·62
1928,	-	20	16	36	0·37	0·30	0·67

CHART SHOWING DEATH-RATES PER 1000 OF POPULATION FROM TUBERCULOUS DISEASES IN THE COUNTY (LANDWARD), 1895-1928.



cases includes 9 patients from Woodilee Mental Hospital, whereas the number of deaths, namely 12, does not include 2 deaths in this institution which, for statistical purposes, are transferred to other Local Authorities. Of those who died within the year, the average period of survival after notification was 10·9 weeks, and the duration of life after notification is shown in the following table:—

Total.	Period of Survival after Notification.						
	1 Week.	1 Month.	3 Months.	6 Months.	9 Months.	Over.	Notified at Death.
12	2	—	4	3	—	1	2

The age distribution of the cases was as follows:—

Age Periods.								
Under 5	5—10	10—15	15—25	25—35	35—45	45—65	Over 65.	Total.
—	2	5	14	15	6	8	2	52

On two occasions during the year, post-mortem examinations were carried out by the Staff to confirm a provisional diagnosis of malignant disease in suspect cases of Tuberculosis. In one, a male, aged eighteen, the onset was a sudden effusion of fluid into the pleural cavity, with no premonitory symptoms, causing immediate and distressing dyspnœa in a patient who felt perfectly well in the morning. The lesion was a lympho-sarcoma commencing in the mediastinum, spreading outwards to form a mass of tumour tissue at the lung root, along the bronchi, and infiltrating the surface lymphatics of the pleura.

The second was a patient of over forty years of age who had a history of recurrent pleurisy extending over a period of eighteen months. The full pathological report is not yet available, but the lesion was a tumour intermediate in microscopic structure to sarcoma and carcinoma, the duration of illness rather tending to confirm the latter type.

NON-PULMONARY TUBERCULOSIS.—During the year under review 69 cases (36 males and 33 females) were notified, as against 64, 72, and 65 in 1927, 1926, and 1925 respectively. By the end of the year 10 had died; in 12 cases the diagnosis was not verified; 26 of the cases notified were sent for institutional treatment, and 7 received domiciliary treatment. It should be noted that the total of 69 cases includes 1 patient in Woodilee Mental Hospital, whereas the number of deaths, namely 10, does not include 1 death in this institution, which, for statistical purposes, is transferred to another Authority. These cases may be conveniently classified according to age and situation of the disease as follows:—

Situation of the Disease.	Age Periods.								Total.
	Under 5	5—10	10—15	15—25	25—35	35—45	45—65	65 and over.	
Glands, -	10	10	2	4	2	—	—	—	28
Bones and Joints, -	—	2	—	2	2	1	—	—	7
Abdomen, -	9	9	2	2	1	—	—	—	23
Spine, -	—	1	—	1	1	—	—	—	3
Meninges, -	3	1	—	—	—	—	—	—	4
Skin, -	—	1	—	—	—	—	—	—	1
Other, -	1	1	1	—	—	—	—	—	3
Total, -	23	25	5	9	6	1	—	—	69

Of those who died within the year, the average period of survival after notification was 2.86 weeks, and the duration of life after notification is shown in the following table:—

Total.	Period of Survival after Notification.						Notified at Death.
	1 week.	1 month.	3 months.	6 months.	9 months.	Over.	
10	4	1	1	1	—	—	3

The following tables show distribution according to age periods of the deaths from Pulmonary and Non-Pulmonary Tuberculosis during 1928:—

PULMONARY TUBERCULOSIS.

Area.	Age Periods.								Total.
	0—5	5—10	10—15	15—25	25—35	35—45	45—65	65+	
Western District,	—	—	—	1	4	1	6	—	12
Eastern District,	—	—	1	2	1	1	3	—	8
County,	—	—	1	3	5	2	9	—	20

NON-PULMONARY TUBERCULOSIS.

Area.	Age Periods.								Total.
	0—5	5—10	10—15	15—25	25—35	35—45	45—65	65+	
Western District,	3	2	2	1	—	—	—	—	8
Eastern District,	2	2	—	2	2	—	—	—	8
County,	5	4	2	3	2	—	—	—	16

ULTRA-VIOLET LIGHT TREATMENT.

In all, 49 patients from the County (Western District, 35; Eastern District, 14) were treated by Ultra-Violet Rays, 35 in institutions and 14 as out-patients. The situation of the disease was as follows:—

Localisation of Disease.	In-Patients.	Out-Patients.	Total.
Bones and Joints, - -	1	1	2
Glands, - - - -	13	6	19
Abdomen, - - - -	19	1	20
Skin, - - - -	—	6	6
Other, - - - -	2	—	2
Totals, - -	35	14	49

TUBERCULOSIS: FURTHER CONSIDERATIONS.

Surveying the statistics for the year, despite the generally favourable trend, there are still unsatisfactory aspects. Pulmonary cases still come to our notice for the first time in the Registrar's Returns, and patients are still too frequently notified in such an advanced condition that curative treatment is impossible. There are, of course, patients who only seek advice when forced by weakness, or inability to work, but it does happen that when they come the condition is not recognised, and a cough is treated for a prolonged period without even a sputum test. At the end of this period, removal to an institution may help the patient, but the possible damage done to the family is irremediable. This takes place even in this district where there is the usual harmonious relationship between Public Health Officials and general practitioners.

There are no new developments in the treatment of tuberculosis. The Western District now possesses a well-equipped Ultra-Violet Light treatment installation in Alexandria. This has not been sufficiently long in use to report on, but the cases under treatment, lupus, enlargements of superficial and abdominal glands, sinuses of soft tissue, &c., have shown distinct improvement.

Clinics are held in Alexandria, Renton, and Duntocher, and enable the Tuberculosis Officer to make more frequent examinations of suspect and contact cases, and to be more readily available for advice.

The battle is still being waged against the mothers who bring up their children by "instinct," or, rather, by the line of least resistance. The educational work carried out at clinics, and in visiting, is one of the most valuable services carried out by the Health Staff.

The probable amalgamation of Poor Law and Public Health services should greatly facilitate the task of helping necessitous families.

The County does not yet possess a fully equipped sanatorium. Pulmonary cases, of a chronic and advanced type, are admitted to Dumbarton Joint Hospital and Lennox Joint Hospital. Other pulmonary cases are sent to various sanatoria, but chiefly to Glenlomond, where we have the advantage of a well-equipped institution offering a complete range of treatment. Suitable cases are also sent to Hairmyres Training Colony. Children and young adults suffering from osseous or other forms of non-pulmonary tuberculosis requiring special treatment are sent to St. Andrew's Home, Millport. Debilitated children, with tuberculous adenitis and minor non-pulmonary lesions, are sent to Prestwick. One cannot speak too highly of the work carried out on

behalf of children by the Glasgow Fresh-Air Fortnight Society, and the stimulus given to parents from the poorer quarters, when they see the evolution of a healthy child under the simple and wholesome open air regime at these homes. One can notice a greater eagerness to learn, and to carry out, the measures necessary to keep the children fit on returning home. Parents, more particularly those who have been removed from condemned houses to the new housing schemes, seem to have a new incentive to improvement, both in their mode of living and in the care of their families—a most gratifying feature.

Thus, although we have no modern sanatorium of our own, we have, although at a distance, complete and satisfactory treatment available for all types of cases. One exception may be noted, adult non-pulmonary cases. At times one hesitates to subject the latter to the strain of a long journey, and there is no accommodation in the County.

The prospective widening of the County administrative area may render possible the provision of a modern sanatorium adequately equipped for the most advanced methods of treatment and diagnosis, and affording facilities for artificial pneumo-thorax refills, renewal of plasters, and any other out-patient work of a similar nature.

This would be the final weapon in a comprehensive anti-tuberculosis armamentarium.

BACTERIOLOGICAL EXAMINATIONS.

The number of specimens examined in the County Laboratory during the year is shown in Table VII. There was a slight increase in the total number owing to the prevalence of Diphtheria.

Towards the end of the year the Committees sanctioned the appointment of a Laboratory Assistant, the salary to be on the scale of an Apprentice Clerk. The appointment was made in October.

SMALLPOX.

VACCINATION.—No case of smallpox was reported during the year.

The question of providing a joint Smallpox Hospital made considerable progress during 1928, and at the end of the year an agreement had been drawn up and was awaiting the signatures of the combining authorities.

It is of interest to note that out of 8069 children examined by the school Medical Officers during the year ended 31st July, 1928, in the County 3546 or 43.9 per cent. were found to be unvaccinated. As far as the Landward part of the County was concerned the Vale of Leven showed the largest percentage of unvaccinated children, namely, 53.9 per cent.

The following tables show the numbers of conscientious objections to vaccination recorded during the year:—

WESTERN DISTRICT.

Registration District.	Number.
Arrochar, - - - - -	1
Bonhill, - - - - -	160
Cardross, - - - - -	6
Dumbarton, - - - - -	—
Kilcreggan and Cove, - - - - -	—
Kilmarnock, - - - - -	—
Luss, - - - - -	—
Renton, - - - - -	71
Rosneath, - - - - -	2
Rhu, - - - - -	3
	<hr/>
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EASTERN DISTRICT.

Registration District.	Number.
Cumbernauld, - - - - -	44
East Kilpatrick, - - - - -	3
Kirkintilloch, - - - - -	42
Milngavie (Landward), - - - - -	—
West Kilpatrick, - - - - -	63
	<hr/>
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BLIND PERSONS ACT.

At the end of 1928 there were 138 names on the Register of Blind Persons, including 8 new names added during the year. The following table shows the distribution of cases in the County area excluding the Burgh of Dumbarton:—

	On Register at 1/1/1928.	Added during year.		Died during year.	Left district during year.	On Register at 31/12/1928.
Burgh of Clydebank, -	45	6	51	—	—	51
Burgh of Kirkintilloch, -	13	—	13	—	—	13
Burgh of Helensburgh, -	5	1	6	—	—	6
Burgh of Milngavie, -	5	—	5	—	—	5
Burgh of Kilcreggan, -	3	—	3	—	—	3
Eastern District (Landward), - -	20	1	21	1	1	19
Western District (Landward), - -	43	—	43	1	1	41
	<hr/>					
	134	8	142	2	2	138

TABLE VII.—BACTERIOLOGICAL EXAMINATIONS IN COUNTY LABORATORY, 1928.

NATURE OF SPECIMENS.	Western District.		Eastern District.		Burgh of Dumbarton.		Burgh of Milngavie.		Education Authority.		Dumbarton Joint Hospital.		Duntocher Joint Hospital.		Totals.
	+	-	+	-	+	-	+	-	+	-	+	-	+	-	
Sputa for Tubercle Bacilli, -	6	76	9	70	15	37	2	21	-	-	21	25	-	3	285
Swabs for Diphtheria Bacilli,	37	142	30	73	45	106	3	47	-	-	182	287	28	85	1065
Blood Agglutination:															
Typhoid or Paratyphoid, -	2	16	3	12	-	-	-	2	-	-	-	-	1	5	41
Urine for Tubercle Bacilli, -	1	2	-	-	-	-	-	-	-	-	-	-	-	-	3
Hair for Ringworm, -	-	-	-	-	-	-	-	-	-	3	-	-	-	-	3
Fluid for Meningococci, -	-	1	-	-	-	-	-	-	-	-	3	2	1	1	8
Pleural fluid for Tubercle															
Bacilli, -	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Pus from Ear, -	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Totals, -	46	237	42	155	60	145	5	70	-	3	206	314	30	94	1407

In addition one swab from Kirkintilloch Burgh and two swabs from Kilcreggan were found to be negative, while one swab from Stirlingshire was found to be positive. Three specimens submitted otherwise were also examined.

The numbers in the Western District were two less than last year, the residences being as follows:—Bonhill Parish, 18; Cardross Parish, 19; Rhu Parish, 2; Arrochar Parish, 2. In the Eastern District the total number was one less than last year. These persons resided in the following parishes:—Cumbernauld, 5; East Kilpatrick, 1; West Kilpatrick, 13.

As regard the 8 new cases, 4 were males and 4 were females. The ages were as follows:—

Between	5 and 10 years,	-	-	-	-	1
"	50 " 30 "	-	-	-	-	1
"	20 " 60 "	-	-	-	-	2
"	60 " 70 "	-	-	-	-	2
"	70 " 80 "	-	-	-	-	2

The causes of blindness as far as ascertained were as follows:—Cataract, 4; accident, 2; unknown, 2.

During the year 4 patients were admitted to the Royal Glasgow Asylum for the Blind, and at the close of the year 5 further applicants were awaiting admission.

At the end of 1928 there were 3 blind persons in the Dumbarton Combination Poorhouse, all of whom belong to the Burgh of Clydebank.

During the year 20 certificates were issued to persons on the register to enable them to obtain free wireless licences under the Wireless Telegraphy (Blind Persons) Facilities Act, 1926.

The arrangement for the provision of travelling facilities was continued during the year, and 5 blind persons availed themselves of the provision.

TREATMENT OF VENEREAL DISEASES.

The table below gives details regarding the numbers of patients dealt with and attendances during the year ended 30th November, 1928. It will be noted that there has been a considerable increase in the number of out-patient attendances, which is a satisfactory feature.

Six patients residing in the Landward areas were granted travelling expenses while attending Clinics in Glasgow. Of these patients, 5 were from the Western District and 1 from the Eastern District. The total expenditure under this heading was £6 10s. 11d.

Twenty-six specimens of blood were sent to the Glasgow Corporation Laboratories for the Wasserman test. Of these, 3 gave a positive reaction, 4 were doubtful, and 19 were negative. Two specimens of exudate were also submitted.

Drugs for the treatment of these diseases were supplied in only one instance, the substance being Novarsenobillon, the total cost being 14s. 10d.

PATIENTS TREATED AT VENEREAL DISEASE CENTRES DURING THE TWELVE MONTHS ENDING 30TH NOVEMBER, 1928.

TREATMENT CENTRE.	IN-PATIENTS.		OUT-PATIENTS.	
	Number of persons not previously Out-Patients admitted as In-Patients.	Aggregate number of In-Patient days.	Number of persons not previously In-Patients treated at Out-Patient Clinics.	Aggregate Out-Patient attendances.
Western Infirmary, -	—	—	11	333
Eye Infirmary, - -	1	121	5	185
Lock Hospital, - -	3	172	4	15
Broomielaw Treatment Centre, - - -	—	—	11	315
Royal Hospital for Sick Children, - - -	—	—	1	60
Black Street Dispensary, -	—	—	20	296
Baird Street Hospital, -	—	—	2	25
Belvidere Hospital, -	3	108	—	—
Totals, - - - -	7	401	54	1229

In October and November further propaganda work was carried out, and meetings were held in various villages in the Districts. At these meetings the film "The Dangers of Ignorance" was shown, and the speakers were, for the men's meetings, Dr. W. G. Clark, of the Glasgow Health Department; and, for the women's meetings, Dr. Elizabeth Smith, Glasgow. The meetings for men were held in Cumbernauld, Duntocher, and Renton, and the women's meetings were held in Cumbernauld and Alexandria. There were good attendances on all the occasions, and the speakers were listened to with marked attention.

METEOROLOGY.

Table VIII. shows the records of rainfall and the number of days on which rain fell. It will be noticed that April and May were the driest months, while January and October were the wettest. The amount of frost and snow was comparatively small.

RIVERS POLLUTION.

River Leven.—In April a complaint was received from the Secretary of the Loch Lomond Angling Improvement Asso-

TABLE VIII.—RAINFALL DURING 1928.

STATION.	OBSERVER.	Rain Gauge.			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
		Diameter.	Height above Ground.	Height above Sea-level.													
Valve House, Largs Rd., Helensburgh,	Jas. N. Stirling, Burgh Surveyor,	in.	ft. in.	ft.	13·09 30	6·00 10	5·85 23	2·92 15	2·49 11	7·62 24	4·74 22	5·36 20	5·14 17	8·88 24	9·50 23	6·49 22	78·08 250
Estate Office, Rosneath,	Wm. Rankine,	..	..	..	12·71 30	5·49 10	5·51 24	2·64 14	2·03 0	5·76 24	4·31 15	5·32 22	5·04 16	9·22 25	8·76 21	6·30 22	73·09 241
Glen Finlas,	George Beaton, Water Superintendent,	..	..	..	17·37 30	7·50 21	5·70 19	4·28 13	2·36 10	9·80 24	7·06 22	8·84 22	6·14 15	10·77 25	12·51 22	7·33 23	100·56 246
Renton Filters, ..	Charles Brown, Water Superintendent,	4	4 0	202	11·99 30	5·96 20	5·18 20	3·19 15	2·45 5	6·12 18	4·30 16	5·42 15	5·24 13	9·14 23	6·90 19	4·75 21	70·64 215
Cochmo Filters, ..	E. T. Collins, Water Superintendent,	5	1 0	400	0·22 27	4·61 19	4·55 21	1·52 11	2·13 6	5·24 21	3·05 16	4·18 16	3·38 12	7·95 24	6·68 20	4·07 18	56·58 211
Cochmo Loch, ..	Do.	5	1 0	909	12·38	5·70	0·20	2·57	0·75	0·05	5·25	8·45	4·99	8·08	8·07	4·72	75·01
Jaw Reservoir, ..	Do.	5	1 0	912	12·30	5·78	5·62	2·92	0·80	*1·20	2·70	0·44	4·72	9·35	8·65	4·60	64·78
Greenside Reservoir, ..	Do.	5	1 0	875	12·40	5·65	6·13	2·41	0·91	7·21	5·02	8·78	4·90	9·33	7·41	4·98	74·83
Milngavie, ..	Rev. Malcolm M'Leun,	5	1 0	175	8·41 30	4·03 20	4·28 22	1·42 10	2·06 8	5·10 22	2·97 15	4·97 20	3·63 15	7·13 26	5·45 22	4·63 20	54·14 239
Mean Rainfall (Scotland), ..	Meteorological Reports,	..	..	..	7·77 28	3·27 17	3·82 24	1·54 16	1·73 11	4·90 21	2·11 15	4·08 20	3·8	5·37 23	4·73 21	3·89 19	46·39 230

*Gauge appeared to have been interfered with.

ciation with reference to the fish in the river becoming tainted, and giving a taste and smell somewhat similar to that of iodine, when cooked. The river was inspected, but no special source of pollution could be detected.

Owing to a further complaint, a sample of water was taken from the river below Cordale Works. This did not show any indication of trade pollution, although there were distinct evidences of sewage, which was only to be expected.

The Argyll Works, which are being converted for the production of artificial silk, did not commence operations during the year, but the possibility of pollution from this source was inquired into, and an assurance received that everything possible would be done to purify any effluent in such a way as to make it innocuous.

Towards the end of the year the river was running fairly full, and no further complaints were received.

Rivers Kelvin and Allander.—Apart from a complaint regarding frothy scum appearing on the River Kelvin, due in all probability to discharges entering the Allander, no serious pollution occurred during the year.

The tanks at the Ellangowan Works were visited, and found satisfactory.

Rivers Luggie and Bothlin.—A complaint was received in May regarding the condition of these streams, and inspections were made. At a later date, in June, a request was received from the Board of Health for information regarding the Bothlin, and the following was submitted:—

“ REPORT ON CONDITION OF BOTHLIN BURN.

“ As requested in the letter from the Board of Health dated 22nd June, I have to report on the condition of the above burn as follows:—

“ The Bothlin Burn enters the County of Dunbarton from Lanarkshire at a point about 300 yards south of the main Edinburgh and Glasgow Railway line and directly east of the Monkland and Kirkintilloch Railway line. From there it flows parallel to the last-named railway line, and, crossing under the Edinburgh and Glasgow line, enters the Woodilee Mental Hospital grounds. Before passing under the drive of that institution it receives the drainage from the lodge. About 100 yards farther on, the pit water from Woodilee Colliery, with which is mixed the effluent from the Kirkintilloch Gas Works, enters the stream. Before crossing under the road leading from the asylum to Kirkintilloch the burn

receives the effluent from the septic tanks and filters from that institution. As far as can be ascertained, during the remainder of its course in the County of Dunbarton (which extends to about 1000 yards) the burn does not receive any further pollution. It joins the Luggie slightly below St. Ninian's Bridge.

"The Bothlin Burn has been periodically inspected, more especially in connection with the effluent from the Woodilee Mental Hospital, and, being a burn which rises and falls very rapidly and which sometimes contains very little water indeed, the amount of pollution present has been ascertained to vary within very wide limits.

"As regards the sources of pollution in the County of Dunbarton, it has never been thought necessary to take any exception to the pit water and effluent from the Gas Works; indeed it has never been possible to demonstrate the presence of phenols in this effluent which, owing to the added pit water, is a fairly large one. The effluent from the Woodilee Mental Hospital has on some occasions been found to be somewhat unsatisfactory, but on nearly every inspection the works appeared to be carrying out their function satisfactorily.

"Owing to a complaint from Mr. Peter Turner, farmer at Oxbang Farm, received by me on 21st May, a copy of which is attached, I instructed Dr. Reid, Assistant Medical Officer, to visit the stream and to take samples at certain points which I indicated to him. Dr. Reid stated at that time that the burn was very low, and it will be seen from the analyses of samples taken (copies of which form an appendix to this report) that there was a considerable amount of pollution in the stream practically at its point of entry into the County of Dunbarton, that is to say, at a point above the bridge at the lodge of the Woodilee Mental Hospital; see sample No. 4.

"From the other analyses submitted it will be seen that the Bothlin Burn on 21st May was very considerably polluted with materials which might have come from sewage. It will be noted that the fifth sample was taken from the River Luggie after its junction with the Bothlin.

"I have also attached copy of a letter with reference to sample No. 4, above referred to. This letter, which is from Messrs. Tatlock & Thomson, indicates the sewage percentage pollution, calculated on the ingredients in the various samples. It shows two things, firstly, that the Bothlin enters Dunbartonshire with a considerable amount of substance in it indicative of sewage pollution, and leaves the County still further polluted by substances of the same description.

“ On receiving the complaint from the Board of Health dated 22nd June, I paid a personal visit to the stream. I found that there was a considerable flow of water in the burn, and that there was no actual pollution at any of the points visited. I took two samples for analysis, one at the point at which the burn enters into the County of Dunbarton, and the other at the point where it joins the River Luggie. Copies of these analyses are appended.

“ It will be noticed that the Bothlin enters the County of Dunbarton in a polluted condition, containing as it does $\cdot 58$ grains to the gallon of free ammonia; $\cdot 13$ of nitrates as nitrate of soda; and $3\cdot 6$ of chlorine equal to sodium chloride. It will also be noted that, according to Messrs. Tatlock & Thomson’s statement, on entering the County of Dunbarton the stream contains about 12 per cent. of sewage, while on joining the Luggie it contains over 15 per cent. of sewage, so that during its course through Dunbartonshire it is obviously polluted to some extent. Comparing sample No. 4 taken on 21st May, which consisted of water taken at very nearly the same place, it will be seen that that sample is almost twice as polluted. This, of course, would be due to the considerable amount of water present on 27th June.

“ On making inquiry as to where the pollution from Lanarkshire can come from, I was informed that the effluent from Auchengeich Colliery drains into the Bothlin, as well as the sewage from Chryston and possibly from Steppe. On receiving this information I wrote to Dr. Hume Patterson, Medical Officer of Health for the County of Lanark, pointing out the condition of the stream, and asking him to have an inspection made of the portion in Lanarkshire.

“ Under the circumstances I am inclined to agree with Mr. Turner that the Bothlin Burn is not suitable for the purposes of watering his cattle in its present condition.

“ THOMAS LAUDER THOMSON,
“ *Medical Officer of Health.*”

COUNTY COUNCIL OFFICES,
88 COLLEGE STREET,
DUNBARTON, 5th July, 1928.

“ City Analyst’s and Gas Examiner’s Laboratory,
“ 156 Bath Street,

“ Glasgow, C.2, 30th May, 1928.

“ Analyses of 2 samples of effluent and 3 samples of water received on the 22nd inst., from Dr. T. Lauder Thomson, Medical Officer for the County of Dunbarton.

“ Labels:—No. 1.—Eastern District. Rivers pollution. Name of river or stream, Bothlin Burn. Exact source of sample, 5 ft. below last outlet of Woodilee sewage plant. Name of collecting officer, E. N. Reid. Date collected, 21/5/28. Time of day, 3 p.m.”

“ No. 2.—Eastern District. Rivers pollution. Name of river or stream, Bothlin Burn. Exact source of sample, from filter beds into burn. (Woodilee.) Name of collecting officer, E. N. R. Date collected, 21/5/28. Time of day, 3.15 p.m.”

“ No. 3.—Eastern District. Rivers pollution. Name of river or stream, Bothlin Burn. Exact source of sample, below Gas Works and pit outlet and above Woodilee sewage. Name of collecting officer, E. N. R. Date collected, 21/5/28. Time of day, 3.20 p.m.”

“ No. 4.—Eastern District. Name of river or stream, Bothlin Burn. Exact source of sample, above bridge at lodge, Woodilee. Name of collecting officer, E. N. R. Date collected, 21/5/28. Time of day, 3.30 p.m.”

“ No. 5.—Dunbarton County. Water from Oxbang Bridge. 25/5/28. E. N. Reid. 4.30 p.m.”

“ The following are the results of the analyses:—

In Solution.	Grains per Gallon.				
	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
Mineral Matter, -	31.60	31.90	36.10	36.70	36.40
Organic Matter, -	5.50	5.70	3.40	3.10	2.95
Total Solid Matter,	37.10	37.60	39.50	39.80	39.35
Nitrites and Nitrates,	None.	None.	None.	None.	None.
Free Ammonia, -	2.10	1.75	1.47	1.22	1.05
Albuminoid Ammonia,	0.29	0.27	0.06	0.08	0.09
Total Ammonia,	2.39	2.02	1.53	1.30	1.14
Chlorine, - - -	7.06	6.22	7.30	7.15	6.85
Equal to Chloride of Sodium, - -	11.63	10.27	12.03	11.78	11.29
Alkalinity, as Carbonate of Lime, - -	19.70	20.05	18.65	18.20	15.80
Oxygen absorbed from Permanganate in 3 minutes, - -	0.74	0.72	0.66	0.70	0.25
Oxygen absorbed from Permanganate in 4 hours, - - -	1.73	1.70	1.20	1.22	0.88

In Suspension.		Grains per Gallon.				
		No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
Mineral Matter,	-	1.12	0.57	0.16	0.25	0.36
Organic Matter,	-	2.06	1.35	0.28	0.40	1.18
Total Suspended Matter,		3.18	1.92	0.44	0.65	1.54
Dissolved	Oxygen					
taken up in	5 days,	2.4	2.3	1.4	1.2	1.0

“ No. 1.—Taking this as an effluent, the suspended matter is high, the limit recommended by the Royal Commission on Sewage Disposal being 2.1 grains per gallon, and the dissolved oxygen taken up in 5 days is also high, the limit recommended being 1.4 grain per gallon.

“ A comparison of these figures with the results of the analyses of the other samples will give a general idea of their condition, with regard to the amount of sewage in them. The free and albuminoid ammonia and the oxygen absorbed from permanganate also indicate that the waters Nos. 3, 4 and 5 are highly polluted, but there is no indication of the presence of any trade effluent.

(Signed) “ R. R. TATLOCK & THOMSON.”

“ City Analyst's and Gas Examiner's Laboratory,

“ 156 Bath Street,

“ Glasgow, C.2, 30th June, 1928.

“ Analyses of two samples of water received on the 27th inst. from Dr. T. Lauder Thomson, Medical Officer for the County of Dunbarton.

“ Labels.—Eastern District. Rivers pollution. No. 1. Name of stream or river, Bothlin. Exact source of sample, at County boundary with Lanarkshire. Reason for collection, alleged pollution. Name of collecting officer, Thomas Lauder Thomson, M.O. Date collected, 27/6/28. Time of day, 12.15.”

“ Eastern District. Rivers pollution. No. 2. Name of river or stream, Bothlin. Exact source of sample, at junction with River Luggie. Reason for collection, alleged pollution. Name of collecting officer, Thomas Lauder Thomson, M.O. Date collected, 27/6/28. Time of day, 12.50.”

In Solution.		Grains per Gallon.	
		No. 1.	No. 2.
Mineral Matter,	- - - -	19.21	20.05
Organic Matter,	- - - -	2.80	3.32
Total Solid Matter,		22.01	23.37

In Solution.				Grains per Gallon.	
				No. 1.	No. 2.
Nitrates as Nitrate of Soda,	-	-	-	0.13	0.21
Free Ammonia,	-	-	-	0.583	0.762
Albuminoid Ammonia,	-	-	-	0.070	0.105
Total Ammonia,	-	-	-	0.653	0.867
Chlorine,	-	-	-	2.21	2.35
Equal to Chloride of Sodium,	-	-	-	3.64	3.87
Alkalinity, as Carbonate of Lime,	-	-	-	7.23	7.86
Oxygen absorbed from Permanganate in 3 minutes,	-	-	-	0.115	0.130
Oxygen absorbed from Permanganate in 4 hours,	-	-	-	0.460	0.587
In Suspension.					
Mineral Matter,	-	-	-	0.40	0.91
Organic Matter,	-	-	-	0.21	0.78
Total Suspended Matter,	-	-	-	0.61	1.69

“ The above analyses show the composition of these waters, and indicate that there has been considerable pollution with sewage. The ammonia has only been nitrified to a very small extent, and the following gives the percentage of average sewage in each:—

							Sewage per cent.
No. 1,	-	-	-	-	-	-	12.0
No. 2,	-	-	-	-	-	-	15.8

(Signed) “ R. R. TATLOCK & THOMSON.”

“ City Analyst's and Gas Examiner's Laboratory,

“ 156 Bath Street,

“ Glasgow, C.2, 30th June, 1928.

“ Dr. T. Lauder Thomson,

“ 88 College Street,

“ Dumbarton.

“ Dear Sir,

“ I have revised all the figures of the analyses of the five samples of water and effluent received from you, and

reported on 30th May, and find that they are quite correct. The analyses were most carefully carried out, and there was scarcely a possibility of any mistake being made.

“ Taking the ammonias as showing the extent of pollution with sewage, the following will show the percentages of the latter of average composition :—

							Sewage per cent.
No. 1,	-	-	-	-	-	-	42·0
No. 2,	-	-	-	-	-	-	35·0
No. 3,	-	-	-	-	-	-	29·4
No. 4,	-	-	-	-	-	-	24·4
No. 5,	-	-	-	-	-	-	21·0

“ I understand you were surprised at the extent of pollution in No. 4 especially, and that you had not previous experience of this. I understand also that there might possibly be some liquor from gas or coke plant getting into the water, which would account for high ammonia. If there is no chance of this, we are really at a loss to account for the pollution, at least I presume so from what you stated to me. There were no phenols in the waters, and they are usually associated with effluents from the works mentioned, although there might be only traces which could not be detected.

“ The chlorine is practically the same in each sample, except in the case of No. 2, and this does not help much in indicating pollution, but, if anything, the proportions support the evidence of the ammonias.

“ As regards the total solid matter, the excess in No. 4 is due to mineral matter, which, of course, is not objectionable.

“ If I have misunderstood you in any point, you might let me know.

“ Yours faithfully,

“ R. R. TATLOCK & THOMSON.
(Sgd.) “ R. T. THOMSON.”

River Clyde.—A very considerable amount of time was expended during the year in connection with the question of the entry of Bearsden sewage into the river at Yoker. This sewage effluent, although untreated, is extremely dilute. In spite of repeated visits to the outfall, I was unable to detect any serious pollution of the Clyde with solid matter, and it must, therefore, be assumed that the sewage on its long journey from Bearsden to Yoker becomes broken up

and disintegrated to a very considerable extent; indeed, it would appear that screening only would render the effluent much superior to other effluents entering the Clyde from the areas of other Local Authorities. In this connection it is of interest to refer to the researches of W. E. Adency, who during the year published his book, entitled "The Principles and Practice of the Dilution Method of Sewage Disposal." In this book it is clearly shown that the damage done by a sewage when it enters a river is directly in proportion to its power of absorption of oxygen. Of course, the sewage must be of normal quality, and not contaminated by trade effluents which will interfere with any bio-chemical changes.

The inquiry into the discharge of this sewage is referred to elsewhere in the report.

OIL IN NAVIGABLE WATERS ACT.

The only complaint received during the year was regarding oil on the shores of the Gareloch. There were three vessels lying in the loch at the time, including an oil tanker. Inquiries as to the source of the oil did not lead to any definite result, and the persons in charge of these ships denied all knowledge of the matter, and, as there was no evidence as to the exact source of the oil referred to, no action could be taken.

The amount of oil must have been very small, as shortly afterwards an inspection did not reveal any pollution.

SALE OF FOOD AND DRUGS ACTS.

The results of the analyses of samples taken under the Sale of Food and Drugs Acts and the Public Health Preservatives in Food Regulations (Scotland), 1925-27, appear in the reports of the County and District Sanitary Inspectors, pages 81 and 145.

Very few points of interest emerged during the year, apart from the following cases: — Sample No. 72W was one of Gregory's mixture bought from a small retailer. This material, according to the British Pharmacopæia, 1914, should contain 66 per cent. of magnesia. The sample under consideration contained only 54.36, a deficiency of 11.64 per cent. This deficiency was due, without doubt, to faulty methods of storage, Gregory's mixture being a substance which is liable to absorb moisture from the atmosphere as well as carbonic acid, thus altering to some extent its composition.

The attention of the dealer was drawn to this matter.

Two samples of lard, Nos. 51W and 52W, were taken to ascertain the nature of material used in certain fried fish shops in the district. The analyses proved them to be mixtures of lard and cottonseed oil. Of course, no offence was being committed. Five samples of sweet milk, Nos. 11W, 12W, 42W, 50E, and 58E, showed a small deficiency in milk fat. One prosecution was instituted, but the charge was found not proven.

Eight samples of mince taken under the Public Health Preservatives Regulations, showed that excess of sulphur dioxide was present. (These were Nos. 13E, 23E, 25E, 33E, 34E, 29E, 30E, 32E, and 59E.) These samples showed sulphur present varying from 124 parts per million to 2520 parts per million in excess.

Samples No. 33E (test), 2520 parts, and 34E (official), 1700 parts, were so heavily loaded with preservative that the Committee instructed a prosecution, and the retailer was fined £3. The other dealers were warned. In this connection it is of interest to note that sample 23E had also present in it a quantity of starch, and, as the definition of mince is "butcher meat minced," there was some doubt as to whether the presence of starch did not convert it into sausage meat. The material was, however, sold as mince, and was reported on as such. A complete analysis of this so-called mince showed—fat, 23 per cent.; protein (or lean meat), 18 per cent.; starch, &c., 1·08 per cent.; mineral matter, ·86 per cent.; and water, 56·4 per cent. Sausage meat contains between 5 per cent. and 12 per cent. of cereals (starch).

Two samples (test) of whisky showed that they were slightly underproof. Being only test samples, no action was taken.

FERTILISERS AND FEEDING STUFFS ACT, 1926.

This Act came into force on 1st July, 1928, and at a meeting of the Executive Committee on Diseases of Animals it was agreed that, as the County Medical Officer and County and District Sanitary Inspectors had been acting as officials under the Act of 1908, they should continue to carry out the duties imposed by the new Act; likewise that Mr. R. R. Tatlock and Mr. R. T. Thomson, analytical chemists, Glasgow, should continue to act in the capacity of Analysts.

The purpose of the Act is twofold—firstly, there are given

facilities to farmers to have the various materials used in their work analysed; and, secondly, there are given to the officials power to examine and take samples of any of the scheduled fertilisers or foodstuffs in the premises from which they are consigned to the purchaser.

RATS AND MICE (DESTRUCTION) ACT. 1919.

The following is a report submitted jointly by the District Sanitary Inspectors:—

RAT WEEK—26TH MARCH TO 2ND APRIL, 1928.

In accordance with the letter received from the Board of Agriculture, we instituted an intensive campaign against the rats during the week commencing 26th March, 1928.

PROPAGANDA.—This was carried through on the lines adopted in the past, after first inviting the Sanitary Inspectors of the Burghs of Dumbarton, Clydebank, Milngavie, Kirkintilloch, Helensburgh, Cove, and Kilcreggan to co-operate.

During the week prior to the campaign we had displayed throughout the districts two rat films, entitled “The Enemy Within Our Gates” and “The Rat Menace.” These films were booked in December from the Ministry of Agriculture and Messrs. Blunt & M'Cormack, London, and were shown as under.

EASTERN DISTRICT.

Date—March.	Hall.	Film.
17th	Municipal Public Hall, Clydebank, - - -	Rat Menace.
		Enemy Within Our Gates.
19th	Public Hall, Milngavie, -	Rat Menace.
20th	Peoples, Cumbernauld, -	”
	Andrews, Cumbernauld, -	”
21st	Black Bull Picture House, Kirkintilloch, - - -	”
	Twechar Institute, - -	”
22nd	Public Hall, Milngavie, -	Enemy Within Our Gates.
23rd	La Scala, Dumbarton, -	”
	Public Hall, Dumbarton, -	”
24th	Empire, Clydebank, -	”
	Palace, Clydebank, -	”

WESTERN DISTRICT.

Date—March.	Hall.	Film.
19th	Public Hall, Alexandria, -	Enemy Within Our Gates.
20th	Picture Palace, Alexandria, -	” ”
21st	Tower Picture House, Helens- burgh, - - - -	” ”
22nd	Public Hall, Alexandria, -	Rat Menace.
	Picture Palace, Renton, -	”
23rd	Tower Picture House, Helens- burgh, - - - -	”
	Picture Palace, Renton, - -	”

By kind permission of the Chief Constable, we made use of the various Police Stations in the County for the distribution of poison. Circulars were posted to all farmers, piggery, stable, and public works proprietors, also the railway companies, and owners of ships lying in the various anchorages in the Districts. The campaign was advertised in the local papers, while circulars and posters were displayed in all the populous places in the District. During the “Rat Week” slides displaying appropriate slogans were shown on the screens in the Burghs, for this we are indebted to the picture house proprietors, and to the Inspectors of the various burghs.

It is rather difficult to estimate the numbers of the vermin destroyed, and, while the poison sold is really no indication of the interest taken in the campaign, the amount disposed of compares favourably with previous years. The Dumbarton Town Council on this occasion purchased their poison direct from the makers.

The financial reports submitted show the amount of poison sold and disposed of throughout the Districts.

All the refuse coups and sewage disposal works belonging to the various Local Authorities were thoroughly baited and gassed by means of the Horo gassing apparatus, with success.

Regarding the use of poisons, we would like to state here that, while the farmers are rather averse to using poison, they are becoming more and more alive to the fact that it is more profitable to keep a family of cats than harbour a horde of rats. This, coupled with the fact that more attention is being given to the destruction of the vermin during threshing operations, is reducing the numbers very considerably.

(Sgd.) J. D. M'KENDRICK,
(Sgd.) THOMAS ALLAN,

*District Sanitary Inspectors,
Dunbartonshire County Council.*

COUNTY OF DUNBARTON.

WESTERN DISTRICT.

LIST OF STAFF.

District Medical Officer.

THOMAS LAUDER THOMSON, M.D., D.P.H.

Assistant Medical Officer.

EDWARD NEIL REID, M.A., B.Sc., M.B., D.P.H.

Sanitary Inspector.

THOMAS ALLAN.

Assistant Sanitary Inspectors.

WILLIAM B. SAMSON.

WILLIAM STRAIN.¹

NEIL MACDONALD.

FREDERICK MURRAY.²

District Engineer.

D. T. H. MACLENNAN, A.M.I.C.E.

Assistants.

MALCOLM ROSS.

JAMES WATSON, B.Sc.

Nurses.

ELSIE GEORGE.

CHRISTINA J. MAITLAND.

Office Clerks.

CHARLES WATSON.³

ANNIE GRANT.⁵

ELIZABETH MUIR.⁴

ARTHUR MILLER.⁶

¹ Left 24th November, 1928.

² Commenced 26th November, 1928.

³ Off duty after July, 1928, and died 5th February, 1929.

⁴ Clerk in District Sanitary Inspector's Office.

⁵ Clerk in District Engineer's Office for both Districts.

⁶ Commenced in District Sanitary Inspector's Office, 6th October, 1928.

The Medical Officer and Assistant Medical Officer are also Tuberculosis Officer and Assistant Tuberculosis Officer respectively.

The Medical Officers of the Education Authority (Dr. M. M. L. Cathels and Dr. A. D. Cowan) have been appointed Assistant Medical Officers of Health for purposes of administration.

PART II.—THE DISTRICTS.

WESTERN DISTRICT.

VITAL STATISTICS.

POPULATION.—The Registrar General estimates that the population at the middle of 1928 amounted to 30,625, a decrease of 85 when compared with the corresponding figure for 1927. The estimate made up from the Valuation Roll for 1928 shows, on the other hand, an increase of 18, the total calculated being 30,858.

BIRTHS.—Four hundred and eighty births were registered as having occurred in the District during 1928, but as 10 of these were transferred out and 23 additional births were transferred in, the corrected number was 493, as compared with 520 in 1927. The birth-rate was, therefore, 16·1, being slightly less than the preceding year.

DEATHS.—Three hundred and twenty-two deaths occurred in the Western District during the year. Eleven of these deaths were transferred out, and no fewer than 79 (being mostly residents dying in Glasgow institutions) were transferred in. The corrected number was, therefore, 390, and the corrected death-rate 12·7 per 1000 of the population, which is the same as last year. The principal causes of death were Apoplexy, 60; Cancer, 48; Heart Disease, 39; Pneumonia, 23; deaths by violence, 21; Tuberculous Diseases, 20; Bronchitis, 19; Nephritis, 13. The most noticeable feature of the above is that Apoplexy has this year, for some unknown reason, claimed many more victims than usual, and that Cancer comes second in the list, while Tuberculosis is diminished so much that it takes a very low place indeed.

The number of deaths from Pulmonary Tuberculosis during 1928 was 12 (5 males and 7 females). This number gives a death-rate of ·39 per 1000 of the population, as against ·33 in 1927. The deaths from Non-Pulmonary Tuberculosis numbered 8 (5 males and 3 females). The death-rate for this type of disease was ·26 per 1000 of the population, as against ·35 last year.

TABLE IX.—COUNTY OF DUNBARTON—WESTERN DISTRICT—STATEMENT SUPPLIED BY THE REGISTRAR—GENERAL GIVING VITAL STATISTICS FOR 1928.

NUMBERS.		RATE PER 1000 OF ESTIMATED POPULATION.	
Births	(Corrected for Transfers), -	Birth Rate (Corrected for Transfers), -	16.1
Do. Illegitimate (do.), -	-	Marriage Rate (Uncorrected), -	5.6
Marriages (Uncorrected), -	-	Death Rate—All Causes (do.), -	10.5
Deaths (do.), -	-	Do. do. (Corrected for Transfers), -	12.7
Do. (Transferred Out), -	-	Do. do. (Corrected for Transfers and adjusted for Age and Sex Distribution), -	12.7
Do. (Transferred In), -	-	Do. —Tuberculosis, Respiratory System (Corrected for Transfers), -	0.39
Do. (Corrected), both Sexes, -	-	Do. —All Tuberculosis (Corrected for Transfers), -	0.65
		Do. —Principal Epidemic Diseases (Corrected for Transfers), -	0.62

Population — Census 1921, 30,340 ; estimated to middle of 1928, 30,625.

Infantile Mortality Rate (Deaths of Children of under One Year per 1000 Births), corrected —93.

Illegitimate Rate (Illegitimate Births per 100 Total Births), corrected for Transcripts—6.1.

TABLE X.—COUNTY OF DUNBARTON.—WESTERN DISTRICT.—STATEMENT OF CAUSES OF DEATH
(Corrected for Transfers) FOR 1928, SUPPLIED BY THE REGISTRAR-GENERAL.

CAUSES OF DEATH.	ALL AGES.			AGE.											
	Total.	M.	F.	—1	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—	85 and over.
Enteric Fever, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles, - - - - -	6	2	4	1	5	...	...	...	...	...	...	...	...	...	...
Scarlet Fever, - - - - -	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...
Whooping-cough - - - - -	3	1	2	2	1	...	...	...	...	...	...	...	...	...	...
Diphtheria, - - - - -	2	...	2	1	...	...	...	...	...	...	...	...	...	...	...
Influenza, - - - - -	9	3	6	...	...	...	...	...	...	...	3	1	3	1	1
Encephalitis Lethargica, - - - - -	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Epidemic Diseases, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis (Respiratory System), - - - - -	12	5	7	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis, - - - - -	3	2	1	...	3	...	...	...	...	...	...	...	...	...	...
Tuberculosis (Abdominal), - - - - -	2	1	1	...	2	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Disease, - - - - -	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...
Malignant Tumours, - - - - -	48	25	23	...	1	...	...	...	...	2	5	13	19	6	2
Rheumatic Fever, - - - - -	1	...	1	2	...	...	...	...	...	...	...	...	...	...	1
Meningitis, - - - - -	3	1	2	...	...	...	...	...	...	...	...	...	...	...	10
Apoplexy, - - - - -	60	30	30	...	...	...	...	...	...	...	...	...	...	...	...
Heart Disease, - - - - -	39	16	23	...	...	1	...	1	2	1	3	9	12	9	1
Disease of Arteries, - - - - -	9	6	3	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis, - - - - -	19	12	7	3	2	...	...	...	...	...	1	4	8	1	...
Pneumonia, - - - - -	23	16	7	2	...	1	2	3	...	4	3	1	3	4	...
Other Diseases of Respiratory System, - - - - -	6	2	4	...	...	...	...	...	1	...	1	1	1	1	...
Diarrhoea and Enteritis (under 2 years), - - - - -	7	4	3	6	1	...	...	...	...	...	...	...	...	...	...
Appendicitis, - - - - -	3	1	2	...	...	...	...	...	1	...	...	...	...	...	...
All Diseases of Liver (not Malignant), - - - - -	5	1	4	...	...	...	...	...	...	...	...	...	...	...	...
Nephritis (Acute and Chronic), - - - - -	13	6	7	2	...	...	...	...	...	1	3	2	2	2	...
Puerperal Sepsis, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases and Accidents of Pregnancy and Parturition, - - - - -	4	...	4	...	...	...	...	...	3	1	...	...	...	...	...
Diseases of Early Infancy and Malformation, - - - - -	21	13	8	21	...	...	...	...	...	...	...	...	...	...	...
Suicide, - - - - -	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...
Other Violent Deaths, - - - - -	19	13	6	...	3	...	...	...	1	1	2	2	2	1	...
Other Defined Diseases, - - - - -	60	31	29	7	1	1	1	2	4	5	4	7	8	15	5
Ill-defined or Unknown, - - - - -	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...
All Causes, - - - - -	390	197	193	46	19	10	6	10	16	18	39	59	90	53	24

INFECTIOUS DISEASE.

During the year 361 cases of infectious disease were notified as against 453 in 1927. The following are particulars of the various diseases:—

Scarlet Fever.—There was no special outbreak during the year and only 38 cases were notified as against 79 in 1927. Of the cases notified, 27 resided in the Bonhill Parish. One death occurred, but, generally speaking, the type was mild.

At the beginning of the year a case of this disease was notified from a dairy farm. The patient was removed to hospital and appropriate precautions were taken, but it was not deemed necessary to stop the supply of milk from the farm and, as far as could be ascertained, the disease was not conveyed to any of the consumers.

Diphtheria.—Seventy-five cases of Diphtheria were notified during 1928, as against 97 in 1927. Of these cases, 57 were notified from the Bonhill Parish and 15 from the Cardross Parish. Two deaths occurred, both children under five years of age.

On two occasions during the year cases were reported from houses of which a portion was in use as a shop for the sale of eatables. Owing to the nature of the infection it was considered desirable to destroy certain confections and other articles which had been exposed to infection. There is no doubt that this type of shop is extremely undesirable, and that power should be in the hands of the Local Authority to prohibit the sale of foodstuffs where the shop opens directly into the dwelling-house.

During the year a case of Diphtheria was notified from a houseboat on the River Leven. The patient was removed to hospital, and detained there for several weeks. As such premises are not rateable, the occupiers receive the health services at the expense of the ratepayers in the District.

Typhoid Fever.—Only one case was notified during the year. The patient was a summer visitor whose illness was due to a paratyphoid (B) infection. The actual source of infection was somewhat doubtful, but appeared to be connected with an outbreak of the same disease in Essex, in which county the patient had a permanent residence.

Dysentery.—One of the native crew on a ship laid up in the Gareloch was notified as suffering from this disease. The patient was removed to hospital, where the case was finally diagnosed as not suffering from true dysentery.

TABLE XI.—WESTERN DISTRICT.

CASES OF INFECTIOUS DISEASE COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER
DURING THE YEAR 1928

Parish.	Enteric Fever.	Scarlet Fever.	Diphtheria and Mem. Croup.	Erysipelas.	Puerperal Fever.	Primary Pneumonia.	Influenzal Pneumonia.	Chickenpox.	Encephalitis Lethargica.	Infantile Paralysis.	Dysentery.	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Other Tuberculosis.	Totals.
Arrochar, -	1	3	...	...	...	...	...	...	...	...	...	...	...	...	4
Bonhill, -	...	27	57	14	4	31	10	58	1	...	...	...	8	27	237
Cardross, -	...	5	15	11	1	12	12	13	...	...	...	...	3	14	86
Dunbarton, -	...	...	...	...	...	...	1	...	...	...	...	1	...	1	3
Kilmarnock, -	...	...	1	...	...	1	...	...	...	...	...	...	...	2	4
Luss, -	...	2	...	2	...	1	...	...	...	...	...	...	...	...	5
Rosneath, -	...	...	1	1	1	1	...	2	...	...	...	1	...	...	7
Rhu, -	...	1	1	1	..	...	...	4	...	1	1	1	2	3	15
Totals, -	1	38	75	29	6	46	23	77	1	1	1	3	13	47	361
Removed to Hospital, -	1	35	66	5	2	5	1	...	1	...	1	1	10	20	148
Percentage removed to Hos- pital, -	100	92.1	88	17.2	33.3	10.9	4.3	...	100	...	100	33.3	77	42.8	41

TABLE XII.—WESTERN DISTRICT.
SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASE OCCURRING IN
HOUSES OF DIFFERENT SIZES IN 1928.

Disease.	No. of Apartments.					Cases in Institutions.	Total No. of Cases.
	One.	Two.	Three.	Four.	Five.	Over Five.	
Enteric Fever, -	...	...	...	...	...	1*	1
Scarlet Fever, -	2	20	7	2	3	2	38
Diphtheria, -	4	31	19	11	...	10	75
Erysipelas, -	2	14	7	4	1	1*	29
Puerperal Fever, -	1	2	3	...	...	...	6
Chickenpox, -	2	31	11	14	1	18†	77
Influenzal Pneumonia, -	3	15	3	1	1	...	23
Primary Pneumonia, -	3	20	14	2	3	3	46
Dysentery, -	...	...	...	...	...	1 ‡	1
Infantile Paralysis,	...	1	...	...	...	...	1
Encephalitis Lethargica,	1	...	...	...	...	...	1

* Hotel Visitors.

† 2 Cases on Household.

‡ Lascar on Merchant Vessel.

Puerperal Fever.—Six cases of this disease were notified during 1928. These cases are referred to in the section dealing with Maternity Service and Child Welfare.

Pulmonary Tuberculosis.—Thirteen cases of Pulmonary Tuberculosis (8 males and 5 females) were notified during the year. Before the end of the year 2 of these had died and 2 were death transfers; 1 had left the district; in 3 cases the diagnosis was not verified, and 1 was still under observation as doubtful. Tubercle bacilli were present in the sputum of 7 patients, and 10 patients were sent to sanatoria for treatment. One out of the above total was examined by X-rays, with a positive result.

Non-Pulmonary Tuberculosis.—Forty-seven cases of Non-Pulmonary Tuberculosis (24 males and 23 females) were notified during the year; by 31st December 5 had died, and in 7 cases the diagnosis was not verified. Nineteen patients were sent to institutions for treatment, and 6 received domiciliary treatment. Of the above cases, 3 X-ray examinations were made, 2 with positive and 1 with negative results.

HOSPITAL ACCOMMODATION.

Table XIII. shows the number of cases treated in the Dumbarton Joint Hospital during 1928. It will be noticed that no fewer than ten different infections were treated during the year.

Considering that the hospital was originally built with a view to *isolating* not more than three types of infections at a time, it will be recognised that those whose duty it is to administer the hospital deserve great credit for their ingenuity in managing to accommodate the patients sent to them without causing serious cross-infection.

It is, however, with pleasure that I have to report the acquisition of an up-to-date motor ambulance.

The appliances for disinfection, &c., were maintained in a satisfactory condition during the year.

WATER SUPPLY.

As will be seen from Table XIV., a considerable number of samples were examined during the year. It will also be seen that the samples varied in purity; in the cases where the supply appeared to be unsatisfactory, attempts were made to have it improved.

TABLE XIV.—WESTERN DISTRICT—WATER ANALYSES (IN GRAINS PER GALLON), 1928.

Date of Report.	WHERE TAKEN.	Mineral Matter.	Organic Matter.	Total Solids.	Nitrates.	Free Ammonia.	Albuminoid Ammonia.	Total Ammonia.	Temporary Hardness.	Permanent Hardness.	Total Hardness.	Colour (Joch Katrine Water=10).	*Degree of Sewage Contamination.
1928.													
Feb. 7	Blairmyle Farm (tank), -	9.38	.26	9.64	.41	.004	.005	.009	3.89	3.15	7.04	..	1-60
" 7	Blairmyle Farm (Blairnocks), -	6.81	.83	7.64	.30	.001	.008	.009	3.52	1.14	4.76	18	1-80
Mar. 2	Cardross (Kilmahew Burn), -	4.75	.60	5.35	trace	trace	.005	.005	2.52	1.01	3.53	12	..
" 2	Cardross (Asker Reservoir), -	5.62	.40	6.02	..	trace	.003	.013	3.18	1.20	4.38	7	..
" 6	Cardross (new intake), -	6.47	.50	6.97	trace	trace	.004	.004	2.87	2.19	5.06	11	..
" 12	Cardross (Kilmahew Reservoir), -	6.71	.50	7.21	.03	trace	.004	.004	3.15	2.11	5.26	10	..
May 9	Cardross (new intake), -	7.04	.50	7.54	.04	.002	.006	.008	4.83	.90	5.73	10	..
" 25	Shandon School (temporary supply), -	9.97	.25	10.22	.54	..	.003	.003	4.06	2.95	7.01	3	1-50
June 1	Shandon School (tank), -	6.95	.40	7.35	.35	.002	.005	.007	4.18	.74	4.92	7	1-80
" 1	Cardross (new intake), -	6.02	1.46	7.48	.15	.004	.009	.013	1.75	1.82	3.57	35	1-200
July 5	High Duicryne Farm (pump), -	21.25	.40	21.65	1.43	.003	.006	.009	9.58	4.46	14.04	7	1-15
" 5	Mid Gartocharn Farm (well), -	12.93	.40	13.33	.51	.012	.006	.018	7.84	1.93	9.77	6	1-45
Sept. 17	Cardross (Kirkton Cottage), -	3.38	1.10	4.48	..	.003	.011	.014	1.93	.60	2.53	25	..
" 17	Garelochhead (Fuston Place), -	1.98	2.50	4.48	..	.003	.015	.018	.15	.92	1.07	60	..
" 17	Rhu (Fountain, Kirk Green), -	2.60	1.25	3.85	..	.001	.012	.013	.54	1.26	1.80	30	1-32
" 19	S. S. City of Exeter (tank), -	22.85	.30	23.15	.62	.003	.007	.010	16.04	3.52	19.56	..	1-170
" 21	Blairmyle Farm (spring), -	9.72	.30	10.02	.15	.005	.010	.015	6.02	1.60	7.62	5	..
" 27	Bairdounrie Farm (stream), -	2.87	1.85	4.72	..	.002	.015	.017	1.14	.43	1.57	70	..
" 27	Finland Burn (Merkins Moor), -	9.27	1.50	10.77	..	.002	.011	.013	6.12	1.34	7.46	40	..
Oct. 10	Cardross (Kilmahew Burn), -	7.43	.70	8.13	.04	..	.010	.010	5.53	.72	6.25	14	..
Nov. 20	Manse Burn, Luss, -	2.14	.50	2.64	..	.001	.007	.008	.05	.76	.81	10	..

* NOTE.—Messrs. Tatlock & Thomson's regular method of stating their opinion of a water as to sewage contamination is as follows:—
 "It may be regarded as being equal to a mixture of one part of average sewage with.....parts of pure water which had been filtered through earth till clear." The figures in the column marked * give the result according to this method.

An interesting point will be noted, and that is the wide range of colour in these samples when tested against Loch Katrine water. Garelochhead water is six times as dark, while the stream from Blairquhomrie Moor was no less than 7 times as deep in colour. These waters were quite unpolluted and satisfactory, while, on the other hand, the waters which were the clearest were just the ones which showed the most evidence of pollution as shown by the presence of ammonias or nitrates.

The water supplies for Cardross and Gartocharn were both considered during the year, the former on account of deficiency, the latter on account of its unsatisfactory nature, but there was still no definite decision at the end of 1928.

GENERAL SANITATION.

All matters relating to drainage and scavenging and lighting are reported on in detail in the Sanitary Inspector's Report.

In the course of Inspections in the District opportunities were taken by the Medical Officer to inspect the various sanitary arrangements, including the refuse disposal works. Nothing was noticed which called for special comment.

FACTORIES AND WORKSHOPS.

All the details regarding these have been inserted in the District Sanitary Inspector's Report (see pages 87 and 88).

Only one matter was reported by H.M. Inspector of Factories. This related to certain conditions at a yacht yard. Alterations were carried out satisfactorily.

PRIVATE SLAUGHTER-HOUSES.

These were very fully reported on last year, and, as far as those in Alexandria and Renton are concerned, satisfactory repairs were effected.

The slaughter-houses at Cardross and Garelochhead were also improved during the year.

POLLUTION OF THE GARELOCH.

Owing to complaints regarding refuse on the shores of the loch, Mr. F. B. Hamilton, from the Scottish Board of Health, paid a visit of inspection in July. There were at that time nine large vessels laid up in the loch—five City Line, two White Star Line, and one each Anchor-Donaldson and Leyland Line. The City Line vessels had crews on board to the total of 622, most of whom were natives of India.

Mr. Hamilton reported that there was a considerable amount of refuse of all sorts on the beach, some of which might have come from the ships. The following are the closing sentences of Mr. Hamilton's report:—"The presence of such material is somewhat unsightly, but in my opinion there is nothing which could give rise to nuisance likely to be detrimental to the health of the inhabitants of the neighbourhood."

Mr. Hamilton finishes his report as follows:—"It seems to me that if the owners of the foreshores or the Local Authority of the Western District of Dunbarton County were to make a periodic collection and removal of waste materials which are deposited on the foreshores, it would be a decided improvement in so far as the appearance of the foreshore is concerned, besides removing all cause of complaint."

I am afraid these suggestions do not get us very much further, because the owner of the foreshore, whether that happens to be the Crown or a private individual, is not likely to spend money on such a scheme, and I am quite satisfied that the Western District Committee cannot assess for such a scheme.

A large portion of the area of shore referred to is outside any Scavenging District, and, even where inside such a District, the scavenging arrangements do not cover cleansing the shore. It would appear as if the only hope for a further cleansing of the shores was the formation of Scavenging Districts where necessary to deal with the refuse from the houses in the neighbourhood, and the provision by those using the mooring places in the loch of some means of destroying all material which can be burnt and the collection and removal of other material.

The owners of the City Line state that they have arranged for the destruction on board of all combustible material, and this should be strictly enforced. The Clyde Pilotage Authority have amended their Bye-law No. 112 to read—"Ballast, ashes, or rubbish of any kind shall not be discharged into the water at any place between Newark Castle and Kempock Point, including the Gareloch," and it is to be hoped that those officers in charge of ships laid up in our territorial waters will exercise great care that these arrangements are strictly adhered to.

HOUSING.

HOUSING (SCOTLAND) ACT, 1925.

CLOSING ORDERS.—Eighty-six representations under section 6 were made during the year. Of these 56 related to houses in the Bonhill Parish, and Closing Orders were issued for

21 houses of one apartment, 28 houses of two apartments, and 7 houses of three apartments or over.

In 49 instances the houses were occupied and in 7 unoccupied. The tenants who were displaced were given houses in the Slum Clearance houses in Bonhill.

Twenty-eight Closing Orders were issued for houses in Renton. Of these, 9 were of one apartment, 16 were of two apartments, and 3 of three apartments. Twenty-seven were occupied and 1 unoccupied.

One representation referred to a house in Garelochhead, and one to a cottage at Ardmore, Cardross. Closing Orders were issued. As the tenants were removing elsewhere, it was not necessary to provide alternative accommodation.

Particulars of the properties referred to are set forth in the following list:—

BONHILL AND ALEXANDRIA.

Situation of Property.	No. of Houses.	Apartments.			
		1	2	3	4 or over.
331 Main Street, Bonhill, - -	1	—	1	—	—
335 Main Street, Bonhill, - -	2	—	2	—	—
8 James Street, Alexandria, -	1	—	1	—	—
83 Burn Street, Bonhill, - -	1	1	—	—	—
369 Main Street, Bonhill, - -	1	—	1	—	—
363 Main Street, Bonhill, - -	3	1	1	1	—
84 Susannah Street, Alexandria,	1	—	—	—	1
79 Susannah Street, Alexandria,	1	1	—	—	—
82 Susannah Street, Alexandria,	1	1	—	—	—
373 Main Street, Bonhill, - -	2	1	1	—	—
337 Main Street, Bonhill, - -	1	—	1	—	—
40 Croft Street, Bonhill, - -	4	2	2	—	—
161 Main Street, Jamestown, -	1	—	—	—	1
163 Main Street, Jamestown, -	1	—	1	—	—
195 Main Street, Bonhill, - -	4	—	4	—	—
16 Susannah Street, Alexandria,	1	—	1	—	—
22 Susannah Street, Alexandria,	1	—	—	—	1
43 Mitchell Street, Alexandria, -	1	—	1	—	—
2 James Street, Alexandria, -	1	—	1	—	—
6 James Street, Alexandria, -	4	2	2	—	—
49 Susannah Street, Alexandria,	2	1	1	—	—
51 Susannah Street, Alexandria,	1	—	—	1	—
53 Susannah Street, Alexandria,	1	1	—	—	—
81 Susannah Street, Alexandria,	1	1	—	—	—
83 Susannah Street, Alexandria,	1	—	1	—	—
71 Alexander Street, Alexandria,	4	2	2	—	—
Carry forward, - - -	43	14	24	2	3

Situation of Property.	No. of House ^s .	Apartments.			
		1	2	3	4 or over.
Brought forward, -	43	14	24	2	3
83 Alexander Street, Alexandria,	1	1	—	—	—
25 Alexander Street, Alexandria,	1	—	—	1	—
29 Alexander Street, Alexandria,	1	—	1	—	—
165 Main Street, Jamestown, -	1	—	1	—	—
203 Main Street, Bonhill, -	1	—	1	—	—
205 Main Street, Bonhill, -	5	4	—	1	—
Cordale Loan, Bonhill, -	3	2	1	—	—
	56	21	28	4	3

RENTON.

	No. of Houses.	Apartments.			
		1	2	3	4 or over.
204 Main Street, Renton, -	1	1	—	—	—
96 Back Street, Renton, -	1	—	1	—	—
8 Burn Street, Renton, -	13	6	15	—	—
10 Burn Street, Renton, -	1				
12 Burn Street, Renton, -	3				
14 Burn Street, Renton, -	2				
16 Burn Street, Renton, -	2	2	—	2	—
67 Back Street, Renton, -	2				
69 Back Street, Renton, -	2				
37 Back Street, Renton, -	1	—	—	1	—
	28	9	16	3	—

GARELOCHHEAD.

Oaklea, Main Street, -	1	—	1	—	—
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CARDROSS.

Yair Cottage, Ardmore, -	1	—	—	1	—
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Totals, -	86	30	45	8	3
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DEMOLITION OF CONDEMNED PROPERTY.—In February the Local Authority issued Demolition Orders for 6 houses at No. 142 Back Street, Renton, and also for 4 houses at No. 128 Back Street, Renton.

In March the Sanitary Inspector was instructed to arrange for the removal of the houses Nos. 72-76 Back Street, Renton,

under section 2 (1) of the Housing (Scotland) Act, 1925, if the owner did not forthwith render the building safe.

In July the Local Authority made Demolition Orders for the following 56 houses, which had been closed for the statutory period and had not been rendered fit for human habitation :—

Main Street, Bonhill, No. 115 (2 houses); No. 117 (1 house); No. 119 (8 houses); No. 109 (8 houses); No. 111 (1 house); No. 113 (1 house); No. 101 (6 houses); No. 103 (2 houses); No. 105 (1 house); No. 99 (2 houses); No. 101 (4 houses); No. 95 (4 houses); No. 97 (2 houses); No. 323 (4 houses); No. 325 (1 house); No. 327 (1 house); No. 311 (1 house).

Alexander Street, Alexandria, No. 74 (1 house); No. 76 (3 houses); No. 78 (1 house).

Random Street, Alexandria, No. 13 (1 house).

The Crescent, Alexandria, No. 38 (1 house).

In August permission was granted for the conversion of No. 311 Main Street, Bonhill, into a store.

In December the Local Authority issued Demolition Orders for the following properties previously closed :—

Main Street, Bonhill, No. 331 (1 house); No. 335 (6 houses); No. 337 (2 houses).

As regards No. 111-117 Main Street, Renton, permission was given to convert these houses into coal cellars for the use of tenants in other properties, and also for the conversion of No. 36 The Crescent, Alexandria, into a wash-house.

A special case was submitted to the Health Committee in August, when an application was made by the Medical Officer to remove a family living in a tent to a house in the Slum Clearance Scheme. This family was unable to obtain a house, and were suffering from the extremely inclement weather. Under the very special and unusual circumstances permission was granted, with the approval of the Scottish Board of Health.

HOUSING.

I am indebted to the County Architect, Mr. Joseph Weekes, for the following information regarding the progress of the various housing schemes in the District :—

ALEXANDRIA.—The 12 Slum Clearance houses mentioned in last year's report as in course of erection at George Street,

Bonhill, were completed and occupied during the year. The further 12 houses to be built in order to complete the District Committee's Slum Clearance Scheme were in course of erection at the end of the year.

BONHILL.—The 24 Slum Clearance houses at George Street, Bonhill, were completed and occupied at the end of the year.

RENTON.—The 26 Slum Clearance houses which were in the course of erection last year at Tontine Park were completed and occupied by the end of 1928.

FURTHER HOUSING.—The 200 houses referred to in last year's report as having been arranged to be built as follows:—52 at George Street, Bonhill; 76 at Millburn, Alexandria; and 72 at Tontine Park, Renton, were commenced in September, 1928. These houses consist of two and three-apartment flatted and tenemental houses. In addition to these, the question of building houses or tenements on vacant sites caused by the demolition of slum property was before the Committee on a number of occasions during the year. Sketch plans were prepared by the Architect in this connection, but no definite arrangements had been made by the end of the year.

Under the Housing (Financial Provisions) Act, 1924, 42 three-apartment houses were completed at Burnbrae, Alexandria, and occupied, while the 16 houses at Cardross (8 two-apartment and 8 three-apartment) were nearing completion at the end of the year.

SUBSIDISED HOUSES.—Four houses, for which a subsidy of £100 per house was paid by the Local Authority under the 1923 Housing Act, were completed during the year.

HOUSING OF RURAL WORKERS.—The scheme under section 1 (1) of the Housing (Rural Workers) Act, 1926, was adopted by the District Committee in April, 1928, and subsequently confirmed by the Scottish Board of Health. By the end of the year two applications had been received for grants in respect of the improvement of existing dwellings, and both of these were granted. The applications concerned 11 dwelling-houses, and the total amount of grants promised is £290. The works in respect of which these grants were made consisted of the introduction of a water supply at a farm worker's dwelling and the provision of water supply, drainage, &c., at 10 separate dwellings. At the end of the year these works had not been completed.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS. 1928.

The following is the statutory form submitted to the Scottish Board of Health for the year ending 31st December, 1928, on proceedings taken as regards the Inspection, Improvement, and Closure of Dwelling-houses, compiled from the registers kept by the District Sanitary Inspector:—

A. *Housing (Inspection of District) Regulations, 1928.*

1. Number of dwelling-houses inspected,	-	-	474
2. Number of dwelling-houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation,	-	-	153
3. Number of representations made to the Local Authority with a view to the making of Closing Orders,	-	-	86
4. Number of dwelling-houses in respect of which Closing Orders were made,	-	-	86
5. Number of dwelling-houses the defects in which were remedied without either the making of Closing Orders or the service of Notices under section 3 (1) of the Housing (Scotland) Act, 1925,	-	-	16
6. Number of dwelling-houses which after the making of Closing Orders were put into a fit state for human habitation,	-	-	nil

B. *Housing (Scotland) Act, 1925.*

1. Number of dwelling-houses in respect of which Notices were served under section 3 (1),	-	nil
2. Number of dwelling-houses rendered fit for human habitation under section 3 (1),	-	nil
3. Number of dwelling-houses in respect of which Closing Orders were deemed to have become operative under section 3 (1),	-	nil
4. Number of dwelling-houses rendered fit for human habitation by the Local Authority under section 3 (2),	-	nil

5. Number of cases where intimations were given under section 20 (1) as to insufficient water-closet accommodation, - - - -	42
(a) Cases where requirements complied with by owners, - - - -	30
(b) Cases where works carried out by Local Authority after failure of owners to do so, - - - -	nil
(c) Cases still pending, - - - -	12

C. Housing, Town Planning, &c. (Scotland) Act, 1919.

1. Number of cases where Notices were served under section 40 (1) to provide dwelling-houses with water supply, - - - -	nil
(a) Cases where requirements complied with by owners, - - - -	2*
(b) Cases where works carried out by Local Authority after failure of owners to do so, - - - -	nil
(c) Cases still pending, - - - -	10*

* These refer to certain houses where the introduction was undertaken without the issuing of formal Notices but with this section in view.

HOUSING REQUIREMENTS.

The following figures show the estimated needs in the District set forth in the method required by the Scottish Board of Health :—

(a) Number of houses required to relieve overcrowding, - - - -	73
(b) Number of houses required to replace houses at present occupied which should be closed and demolished (and not included under paragraph (c)). - - - -	135
(c) To rehouse persons who will be dispossessed under a reconstruction scheme, - - - -	3
(d) To accommodate persons living in furnished apartments, - - - -	10

SUPPLY OF INSULIN IN DIABETIC CASES.

Under the scheme for the supply of Insulin to persons not otherwise provided with this drug, two applications were made by doctors for supplies of insulin for patients. The total cost of these supplies was £7 13s. 10d.

MATERNITY SERVICE AND CHILD WELFARE.

ALEXANDRIA CLINIC.—In October the clinic work which had previously been carried out in somewhat unsuitable premises in the Co-operative Buildings was moved across the street to the new buildings.

The clinic consists of a two-storeyed building, the lower flat being the clinic proper and the upper story a three-apartment house for the Health Visitor.

The ground floor consists of an entrance hall, to the left of which is a waiting-room. Opening off this room is a dressing-room, which also opens into the entrance hall. The doctor's consulting room is entered either from the dressing-room or the entrance hall. Both the waiting-room and the consulting room have lavatory accommodation attached. In addition to these rooms there is a room for ultra-violet ray work, with a bathroom attached. The premises are heated by gas and lit by electricity. The ultra-violet ray installation consists of two lamps (Sunrae—long flaming arc type) on the Clyde Valley alternating current, while an atmospheric mercury vapour lamp is lit by direct current generated by a motor. These arrangements received very serious consideration, and were considered the most economical method of dealing with the question.

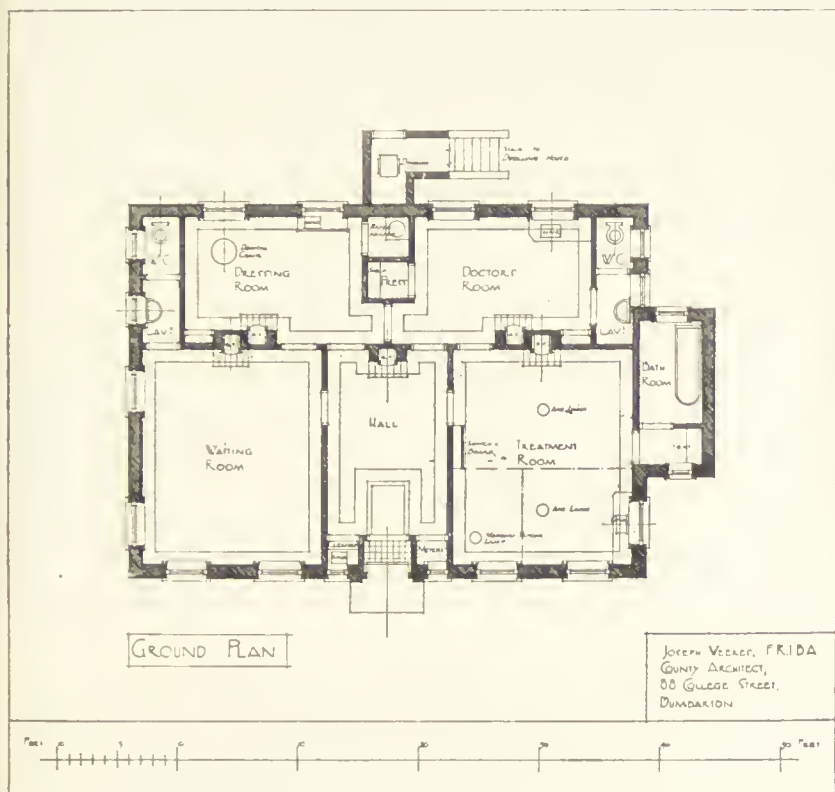
Shortly before the clinic was opened the Education Authority applied to the District Committee for permission to use part of the premises as a dental clinic for the Vale of Leven School Management Committee's area, as their existing clinic in the Main Street School had become unsatisfactory. It was also suggested that the child welfare premises might be made available for the skin and general clinic work. I am glad to say that suitable arrangements were made for the dentist to obtain the use of part of the clinic on two days in the week, and, in addition, for the School Medical Officer to be accommodated on certain days.

It was also arranged that the Assistant Tuberculosis Officer should use the premises from time to time.

After the clinic was opened it was found necessary to provide some further dressing-room accommodation for ultra-violet ray work, and cubicles were therefore introduced into the waiting-room by an arrangement of curtains, a chair being placed in each cubicle. This has been found to be quite satisfactory.

The arrangement and appearance of the clinic is similar to the one erected at Duntocher, with the exception of a different arrangement of windows in the nurses' house. A photograph

of Duntocher clinic appears at page 122, while a plan of Alexandria clinic is seen below.



ALEXANDRIA CHILD WELFARE CLINIC.

The following are the statistics required by the Scottish Board of Health:—

STATISTICS REQUIRED BY APPENDIX TO BOARD OF HEALTH'S CIRCULAR DATED 20TH DECEMBER, 1927.

By the above Circular a detailed statement of particulars in connection with the Child Welfare Schemes of the District is required, and the relative information is set out in the consecutive order specified by the Circular, with the addition of several tables giving fuller details.

1. *Infantile Mortality*.—(a) Number of deaths, 46. (b) Rate per 1000 births, 93. (c) Numbers of deaths and rates per 1000 births classified according to age groups and causes of death—these details are set out in Table No. XVII., with the exception of the rates per 1000 births.

2. Births.—(a) Number registered—(i) legitimate, 453; (ii) illegitimate, 27. (b) Number notified, 490. (This figure includes 5 births which occurred in institutions outwith the area.) (c) Number classified according to nature of attendance—Doctor only, 160; midwife only, 197; both doctor and midwife, 128. (d) Number of still-births (births of dead children), 26.

3. *Maternal Mortality*.—(a) Number of deaths resulting from miscarriage or childbirth, 4. (b) Number of deaths resulting from puerperal sepsis, nil.

4. *Report under Midwives (Scotland) Act, 1915*.—There are 18 midwives practising in the District. Of these, 11 have no qualification other than that they were in practice before the passing of the Midwives (Scotland) Act, 1915. Of the others, one was in practice in 1914, but has since qualified by examination, and the six others are qualified by examination either in Scotland or England.

The following gives the details of the Annual Report on the working of the Act during the year 1928, as required by the Central Midwives' Board. The list of Certified Midwives has been omitted:—

REPORT.

BIRTHS IN DISTRICT:—

Total number of births registered during 1928,	-	-	480
Actual number of births attended by midwives during 1928,	-	-	197
Total number of deaths of new-born children (within ten days) during 1928,	-	-	14
Actual number of deaths of new-born children (within ten days) occurring in the practice of midwives during 1928,	-	-	Nil.
Actual number of cases not attended by a doctor or midwife during 1928,	-	-	Births, Nil. Deaths, Nil.

In addition to the above figures five notifications were received of births which occurred in institutions outside the District, and of these one was still-born.

CASES OF OPHTHALMIA NEONATORUM:—

Total number of cases during 1928,	-	-	3
Actual number of cases occurring in the practice of midwives during 1928,	-	-	1
Actual number of cases occurring where confinement not attended by a doctor or midwife during 1928,	-	-	Nil.

CASES OF PUERPERAL SEPSIS :—

Total number of cases during 1928,	-	-	-	-	6
Total number of deaths during 1928,	-	-	-	-	Nil.
Actual number of cases occurring in the practice of midwives during 1928,	-	-	-	-	3
Actual number of deaths occurring in the practice of midwives during 1928,	-	-	-	-	Nil.
Actual number of cases occurring where confinement not attended by a doctor or midwife in 1928,	-	-	-	-	Cases, Nil. Deaths, Nil.
	-	-	-	-	

CASES OF STILL-BIRTH (DEAD-BORN) :—

Total number of cases during 1928,	-	-	-	-	26
Actual number of cases occurring in the practice of midwives during 1928,	-	-	-	-	3

CASES OF EMERGENCY :—

In 55 instances midwives requiring the assistance of a medical practitioner sent in the statutory forms.

The emergencies were as follows:—

Abortion,	-	-	-	-	-	2
Pregnancy complicated by—						
Abdominal pains,	-	-	-	-	-	2
Weakness,	-	-	-	-	-	1
Ante-partum hæmorrhage,	-	-	-	-	-	3
Funis Presentation,	-	-	-	-	-	2
Breech presentation,	-	-	-	-	-	2
Occipito posterior,	-	-	-	-	-	3
Delay in labour,	-	-	-	-	-	18
Retained placenta,	-	-	-	-	-	2
Ruptured perineum,	-	-	-	-	-	1
Post-partum hæmorrhage,	-	-	-	-	-	5
Puerperium complicated by—						
Fits,	-	-	-	-	-	2
Rise of temperature,	-	-	-	-	-	1
Vomiting,	-	-	-	-	-	1
Abdominal pains,	-	-	-	-	-	2
Inflammation of legs,	-	-	-	-	-	1
Chill,	-	-	-	-	-	1
Stillbirth,	-	-	-	-	-	3
Baby unable to pass urine,	-	-	-	-	-	1
Discharge from baby's eyes,	-	-	-	-	-	1
Injury to baby's arm	-	-	-	-	-	1

ADMINISTRATION :—

There was no change in administration during the year.

NOTIFICATIONS :—

Statutory forms of notification were received during the year as under :—

Notification of still-birth,	-	-	3
Notification of liability to be a source of infection,	-	-	1
Notification of artificial feeding,	-	-	2

The following supplementary figures are of interest :—

The number of births notified in the District was 490,* and, consequently, the percentage of registered births notified was 100.

The percentage of total births attended by midwives only was 40·8.

The percentage of total births attended by doctors only was 33.

The percentage of total births attended by both was 26·2.

The percentage of still-births was 5·4.

5. *Home Visitation.*—

	Number Visited.	Total Visits.
Infants, - - - - -	496	339
Children (1-5 years), - - - - -	1765	4302
Expectant mothers, - - - - -	88	253
Total, - - - - -	2349	4894

6. *Voluntary Health Visitor's Report.*—There are no Voluntary Health Visitors connected with the Scheme in the District.

7, 8, and 9. *Ante-natal, Post-natal, and Child Welfare Consultations.*—The information requested under these three headings will be found in Table No. XVI.

10. *Special Treatment Centres.*—The Local Authority owns no Special Treatment Centres, but during the year, by arrangement with the Education Authority, 19 children were treated, 11 children were sent to the School Dental Clinic at Dumbarton for treatment, 3 children were treated at the Eye Clinic, and 5 children were attended to by Dr. Kerr Love in connection with tonsils, adenoids, or ear conditions.

11. *Day Nurseries, Kindergartens, and Play-centres.*—There are no institutions of this nature connected with the Scheme in the District.

12. *Food and Milk.*—(a) Number of persons in respect of whom applications were made for food or milk—(i) mothers,

* This figure includes 5 births which occurred in institutions outside the District.

32; children, 43. (b) Number of cases certified on medical grounds as requiring food or milk—(i) mothers, 32; (ii) children, 43. (c) Number of cases under (b) certified as necessitous—(i) mothers, 31; (ii) children, 42.

13. *Measles*.—(a) Number of cases notified; notification is not in force. (b) Number of deaths—(i) from measles, none; (ii) from sequelæ, pneumonia, 5; bronchitis, 1. (c) Number of cases removed to hospital, none. (d) and (e) Number of special domiciliary visits, and details of special staff engaged for epidemics; no arrangements of this kind were made.

14. *Whooping Cough*.—The remarks applicable to measles also apply to this disease, with the exception that three deaths took place, the disease being complicated in one instance with pneumonia, in another by convulsions, while one patient died of exhaustion. No cases were removed to hospital.

15. *Ophthalmia Neonatorum*.—(a) Number of cases notified—(i) by doctor, 2; (ii) by midwife, 1; (iii) by institution, none. (b) Number of cases in which infection is gonococcal, 1. (c) Number treated in residential institutions, 1. (d) Number of cases in which there was appreciable loss of vision, none.

16. *Maternity Hospitals or Homes*.—There are no institutions of this nature connected with the Maternity Service and Child Welfare Scheme, but by arrangement during the year two women from the Western District were treated in the Ante-natal Wards of the Royal Maternity Hospital, Glasgow, and notifications were received for 5 births which had occurred in the Labour Wards of that Hospital. The conditions found in the two ante-natal cases were—Contracted Pelvis 1, and Gallstones 1.

17. *Homes for Unmarried Mothers Before and After Confinement*.—No provision is made for these under the Scheme.

18 and 19. *Hospitals for Sick Children and Convalescent Homes*.—By arrangement with the Glasgow Poor Children's Fresh-Air Fortnight and Cripple Children's League, eleven children were treated at the Biggart Memorial Home, Prestwick, during the year.

20 and 21. *Boarding Out and Home Helps*.—It was not found necessary to take any action under these headings during the year.

22. *Educational*.—No special educational features were arranged during the year.

23. *Agencies*.—There are no other agencies associated with the Scheme.

24. *Other Provisions.*—Arrangements have been made under the Scheme for the provision of skilled assistance at confinements, and 37 applications for such assistance were received during the year. Of these, 29 were granted, 7 were refused, and 1 was still under consideration when the year closed.

TABLE XV.—WESTERN DISTRICT.
HOME VISITATION.

PARTICULARS.	VALE OF LEVEN AREA.	REST OF DISTRICT.
Number of Births intimated to Health Visitor during year, - - - - -	318	181
Number of First Visits— - - - -	369	251
To Children under 1 year, - - -	314	182
To Children from 1 to 5 years, - -	13	23
To Expectant Mothers, - - -	42	46
Number of Revisits— - - - -	4167	3167
To Children under 1 year, - - -	1544	1359
To Children from 1 to 5 years, - -	2544	1722
To Expectant Mothers, - - -	79	86
Number of Visits to Midwives, - - -	18	26
Number of Visits of Special Inquiry, - -	56	40
Number of Visits to Tuberculous Cases, - -	179	114
TOTAL VISITS, - - - - -	4789	3598
Number of Infants born prematurely, - -	6	6
Number of Infants born at full time, - -	312	175
Expectant Mothers who consulted doctors or ante-natal clinics, - - - - -	14	20

TABLE XVI.—WESTERN DISTRICT.
MATERNITY SERVICE AND CHILD WELFARE SCHEME.
CLINICS.

PARTICULARS.		ALEXANDRIA.	RENTON.
Number of Clinics held—			
With Health Visitors only in attendance, - - -		48	43
With Doctor and Health Visitors in attendance, -		48	47
Ante-natal Consultations—			
Total Attendances, - - -		43	42
First Attendances, - - -		14	20
Referred to Ante-natal Wards, Maternity Hospital, -		—	1
Referred to family doctor, - - - - -		—	2
Treated at Clinic, - - - - -		14	17
Post-natal or other Consultations, - - - - -		41	44
Child Welfare Consultations—			
Total Attendances—Under 1 year, - - - - -		536	292
Over 1 year, - - - - -		419	286
First Attendances—Under 1 year, - - - - -		119	90
Over 1 year, - - - - -		81	77
Attendances in connection with Milk Applications, - - -		74	29

DISEASES RECORDED ON CHILD WELFARE CLINIC CARDS.

ALEXANDRIA CLINIC.

<i>General Conditions—</i>	<i>Alimentary Diseases—continued.</i>
General Debility, - - - - 5	Hernia, - - - - - 2
Rickets, - - - - - 9	Conditions relating to feeding, 20
<i>Throat, Nose, and Ear Conditions—</i>	Malnutrition, - - - - 6
Tonsils and Adenoids, - - - 5	Thread worms, - - - - 6
Other Nasal Conditions, - - 4	Conditions affecting Umbilical
Ear Diseases, - - - - - 5	Cord, - - - - - 5
Tongue-tie, - - - - - 1	Phimosis, - - - - - 5
Dental Conditions, - - - - 5	Whooping Cough, - - - - 2
Enlarged Glands, - - - - -	<i>Skin Diseases—</i>
Respiratory Diseases, - - - 16	Impetigo, - - - - - 11
Abscesses, - - - - - 3	Eczema, - - - - - 4
<i>Alimentary Diseases—</i>	No special cause, - - - - 12
Diarrhoea, - - - - - 15	Attendances for weighing only, 54
Other Intestinal Conditions, - 2	

RENTON CLINIC.

<i>General Conditions—</i>	<i>Alimentary Diseases—</i>
Debility, - - - - - 10	Diarrhoea, - - - - - 19
Rickets, - - - - - 4	Hernia, - - - - - 10
Underweight, - - - - - 16	Conditions relating to feeding, 4
Dental Conditions, - - - - 6	Thread Worms, - - - - 4
<i>Throat, Nose, and Ear Conditions—</i>	<i>Skin Diseases—</i>
Tonsils and Adenoids, - - - 12	Eczema, - - - - - 8
Ear Diseases, - - - - - 7	Other skin diseases, - - - 6
Tongue-tie, - - - - - 6	Phimosis, - - - - - 12
Enlarged Glands, - - - - - 5	Attendances for weighing only, 13
Respiratory Diseases, - - - 15	
Abscesses, - - - - - 10	

The above are the diseases, &c., noted at first attendances, and the total agrees with the figures shown in the table above.

TABLE XVII.—WESTERN DISTRICT.
MATERNITY SERVICE AND CHILD WELFARE.
CAUSES OF DEATH—CHILDREN UNDER ONE YEAR.
YEAR 1928.

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks, and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total Deaths under 1 Year.
Smallpox, - - -	...	...	...	...	...	...	...	...	...	...
Chickenpox, - - -	...	...	...	...	...	...	...	...	...	...
Measles, - - -	...	...	...	...	...	...	...	...	1	1
Scarlet Fever, - -	...	...	...	...	...	...	...	...	...	...
Whooping Cough, -	...	...	...	...	...	...	1	1	...	2
Diphtheria and Croup, -	...	...	...	...	...	...	...	...	...	...
Erysipelas, - - -	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis, -	...	...	...	...	...	...	...	...	...	...
Abdominal Tuberculosis,	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Dis- eases, - - - -	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuber- culous), - - -	...	...	...	...	...	...	1	...	1	2
Hydrocephalus, - -	...	...	...	...	...	...	...	...	...	...
Convulsions, - - -	3	...	...	...	3	...	1	...	...	4
Pneumonia (all forms), -	...	...	...	...	...	...	1	...	1	2
Bronchitis, - - -	...	...	1	...	1	...	...	...	1	2
Diarrhoea and Enteritis,	...	1	...	1	2	1	4	...	...	7
Other Digestive Diseases,	...	...	...	...	...	1	...	...	...	1
Congenital Malforma- tions, - - - -	1	...	...	2	3	...	...	...	...	3
Congenital Heart, - -	...	...	...	...	...	...	...	...	...	...
Premature Birth, - -	7	...	1	1	9	...	...	...	...	9
Atrophy, Debility, and Marasmus, - - -	4	...	...	...	4	1	...	1	...	6
Atelectasis, - - -	1	...	...	...	1	...	...	...	...	1
Injury at Birth, - -	1	...	...	...	1	...	...	...	...	1
Suffocation, overlaying, -	...	...	...	...	...	...	...	...	...	...
Syphilis, - - -	...	...	...	...	...	...	...	...	...	...
Rickets, - - -	...	...	...	...	...	...	...	...	...	...
All other causes, - -	...	...	2	...	2	1	2	...	...	5
Total, - - -	17	1	4	4	26	4	10	2	4	46

REPORT BY COUNTY AND DISTRICT SANITARY INSPECTOR.

BRIDGE STREET,
ALEXANDRIA.

GENTLEMEN,

I herewith submit Annual Report for the year ending 31st December, 1928, containing particulars of work done in this Department, and set forth in accordance with the instructions received from the Scottish Board of Health.

BUILDING BYE-LAWS.

During the year there was a marked decrease in the number of buildings erected under the Building Bye-laws. The total number of plans passed by the Committee was 75, as against 176 the previous year.

During the year a contravention of the Building Regulations was reported to the Committee. The contravention consisted of the placing together in three sections a ship's cabin to form tea-rooms, with provision being made on top of the structure for open-air dancing. Plans were ultimately submitted, but these were not in order. Proceedings were taken against offending party, who was fined £1.

A subsidy was granted to two owners for houses built under the Housing Act, 1923.

The number of houses completed during the year without State assistance was 2.

Table XVIII. shows the number of plans passed, number of buildings, and number of apartments.

DANGEROUS BUILDINGS.

During the year it was found necessary to deal with the following dangerous structures under section 191 of the Burgh Police (Scotland) Act, 1892 :—

Main Street, Jamestown.—Dangerous chimney heads—taken down.

Steven Street, Alexandria.—Dangerous shed—Taken down.

Lennox Street, Alexandria.—Dangerous wall—repaired.

Main Street, Bonhill.—Dangerous gable made good and chimney head repaired.

The following photographs show the type of dangerous structures dealt with by the Local Authority.

TABLE XVIII.—PLANS OF BUILDINGS—WESTERN DISTRICT.

PARISH.	PLANS.				No. of Buildings.				No. of Houses.					
	New Buildings.		Alterations.		Total.	Bungalows, &c.	Double Villas.	Flats and Terraced Houses.	Total.	2 Apartment.	3 Apartment.	4 Apartment.	5 Apartment and over.	Total.
			Bungalows, &c.	Flats and Terraced Houses.										
	Double Villas.		Flats and Terraced Houses.	Ammended.										
Bungalows, &c.	Plats and Terraced Houses.	Bungalows, &c.	Plats and Terraced Houses.											
Arrochar, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bonhill, -	1	2	...	1	8	4	1	36	41	68	44	...	...	112
Cardross, -	1	2	...	...	5	3	...	22	25	68	49	1	...	119
Dumbarton, -	...	...	...	1	1	...	...	1	1	...	...	...	1	1
Kilmarnock, -	...	...	...	4	5	...	...	4	5	...	...	...	5	5
Luss, -	...	...	...	1	1	...	...	1	1	...	...	...	1	1
Rosneath, -	...	...	...	1	2	...	...	1	2	...	...	...	2	2
Rhu, -	4	...	...	2	10	8	...	2	10	...	1	1	1	9
Total, -	6	1	4	11	32	17	1	67	85	136	97	2	11	249

46 sets of plans were also passed for 14 Garages, 4 Halls, 1 Workshop, 4 Schools, 6 Petrol Pumps, 3 Tea rooms, 1 Slaughter house,
1 Public Convenience, 1 Bank, 1 Pavilion, and 10 other buildings.



DANGEROUS BUILDING DEALT WITH UNDER THE BURGH POLICE (SCOTLAND) ACT, 1892.

DRAINAGE.

VALE OF LEVEN.—In connection with the Millburn Housing Scheme, at present in course of construction, offers have been accepted for the laying down of new sewers. Owing to the nature of the ground it has been found necessary to connect the sewer with the outfall sewer belonging to the Renton District Committee at a point on the main road at the top of Cordale Loan. The estimated cost of the new work is £621.

As a result of flooding which occurs during exceptionally wet weather at the foot of Bridge Street and Bank Street, Alexandria, the following report was sent to the District Engineer for his consideration:—

“ Health Department,

“ Alexandria,

“ 29th November, 1928.

“ D. T. H. MacLennan, Esq.,

“ District Engineer,

“ 24 George Square,

“ Glasgow.

“ Dear Sir,

“ *Vale of Leven Drainage District.*

“ I beg to record the recent experiences within the above District during extremely wet weather. The area that I specially want to draw your attention to is at the foot of Bridge Street and Bank Street, Alexandria.

“ As you are aware, the sewers in Bridge Street and Bank Street carry a considerable quantity of surface water, the result being that periodical flooding takes place of houses and shops in this part of the District due to the fact that the sewers are not of sufficient size to cope with the large volume of surface water that these particular sewers have to deal with. The sewers referred to form the main sewers to the river over a large area. The drainage from Burnbrae Housing Scheme, for instance, finds its way ultimately back into Bridge Street sewer.

“ The flooding at the foot of Bridge Street and Bank Street has recurred repeatedly, and, that being so, the time undoubtedly has arrived for the question to be dealt with and thereby guard against the recurrence of what has occurred repeatedly in the past. Whether this can be best done by the exclusion of surface water from the existing sewers and the provision of a separate means of drainage, or by increasing the size of the existing sewers to deal with the whole

of the effluent, is a matter that can be safely left in your hands.

“ Yours faithfully,

(Sgd.)

“ THOMAS ALLAN.

“ *District Sanitary Inspector.*”

A section of the sewer in Overton Street which was partly choked due to flooding was opened at various points, scraped and cleaned out. A part of the sewer in Argyle Street Alexandria, found to be choked was cleared.

During the year the proprietors of houses in Dillichip Terrace, Bonhill; Napierston, Milton, and Levenbank Terraces, Jamestown; and Linnbrane, Alexandria, were communicated with regarding the question of introducing w.c. accommodation in place of the existing pail privies and privy middens in use, and as a result of this step the question of the increased pollution of the river has been raised and this matter is receiving the attention of the District Committee, and a special report on the subject was prepared by the District Engineer. The Committee decided to again approach Dumbarton Town Council with a view to ascertaining their views on the question of a combined purification system.

In Burn Street, Bonhill, a new sewer was constructed in preparation for the Reconstruction Scheme being carried out.

FISHERWOOD, BALLOCH.—At Fisherwood Filters, Balloch, new distributing trays and channels were fitted.

RENTON.—Complaint was made during the year about the effluent from the outfall sewer at the foot of Thimble Street, more especially during summer months when the river is low. This matter has been remitted to the District Engineer for his consideration and report.

In connection with the Housing Scheme at Tontine Park (Third Development), it was necessary to provide additional drainage facilities, and new sewers were laid at a cost of £300.

RHU.—In connection with the formation of Rhu into a Special Drainage District, it was found necessary to carry out additional work in Spy's Lane. Rhu, at an estimated cost of £300.

LUSS.—At Aldochly a new drainage system for ten houses was introduced and two septic tanks provided. Water-closets are being installed in four of the houses, and it is expected that in the near future additional water-closets will be provided.

As in former years, the drainage system of private houses have been smoke-tested, mostly at the request of the owners.

Reports on the systems were furnished, and any defects found were made good.

DISPOSAL OF REFUSE.

VALE OF LEVEN.—The following is a summary of the work done within Vale of Leven Special Scavenging District :—

Loads Removed.	No. of Bins and Pits emptied.	Weight of Refuse. Tons. Cwts.		Miles Travelled.	Petrol Consumpt Gallons.
4805½	118,511	7688	8	23,090·6	3760

The average weight of each load removed was 32 cwts., and the average number of miles travelled per gallon was 6·1.

It will be noted that there is a decrease in the quantity of refuse removed. This is due to the fact that during the summer months all the wagons were thoroughly overhauled in rotation: in one case the overhaul lasted for three weeks.

The wagons used throughout the District continue to give satisfactory service. It will be interesting to note that the three Albion lorries have been in constant use for eight years.

During the year the four lorries were again overhauled in rotation by the driver mechanic who is employed all the year round by the Committee, and under normal circumstances is in charge of the Vulcan lorry in a section of the District engaged in ordinary scavenging duties.

It will be noted that the petrol consumpt during the year was 3760 gallons, and as an experiment the Sub-Committee authorised the use of R.O.P. spirit as against B.P. spirit which was being used, and I was asked to report on the result of that experiment. In all 2000 gallons of R.O.P. spirit were used, and, from a comparison made of the amount of spirit used compared with B.P. spirit No. 3 formerly in use, the consumpt for a month in 1927 with B.P. spirit as compared with the same month in 1928 with R.O.P. spirit is as follows :—

		Wagon No.				
		1	2	3	4	Total.
B.P. Spirit (1927),	-	68	71	76	72	287 galls.
R.O.P. Spirit (1928),	-	69	65	80	68	282 galls.

“ It will be observed that the Russian fuel is able to hold its own with the B.P. spirit as far as miles per gallon is concerned.

“ In order to study the position with regard to both spirits from a mechanical point of view, I took the question up with the mechanic whose duty it is to overhaul the vehicle, and he points out that the favourable characteristics of the Russian

fuel are that it gives good power when the engine is hot, and it is a splendid fuel for distance runs and for our class of work during summer months. It is unfavourable, however, in the following respects:—It is a heavy fuel to vapourise, causing difficulty in starting during cold weather. It has poor pulling properties when the engine is cold, and gives insufficient acceleration during cold weather when collecting sweepings, &c. It is a fuel which requires the ignition and valve gear to be kept in thorough order, causing more maintenance work.

“With regard to B.P. spirit No. 3, the favourable characteristics of this fuel are—It vapourises easily at a greater variety of temperatures. The easier starting when this fuel is in use allows more frequent stopping of the engine. It gives good acceleration when the engine is only warm, and gives greater latitude with ignition and valve gear. The unfavourable characteristics of the B.P. spirit is that on long runs it is liable to pre-ignition when the engine is hot, and it is not as powerful a spirit as the Russian fuel during summer months.

“The mechanic informs me that he is unable to detect any difference in carbon deposit of either fuel, and he also states that, owing to the peculiar nature of the work the vehicles have to perform, difficulties with regard to fuel evaporation occur which are less commonly met with in other industrial vehicles, and he recommends during the winter months the use of B.P. spirit.”

Application was made during the year by the Road Authority for permission to use the petrol tank and pump recently installed at the Scavenging Department Stores, and this permission was granted, the Road Authority agreeing to pay the Scavenging Department $\frac{1}{2}$ d. per gallon in excess of the price charged to our Department.

The work at Auchencarroch Refuse Depot continues to be carried out in a satisfactory manner. Due to heavy flooding in November, the road to the coup was so badly cut up that, until repairs were effected, permission was granted to dispose of the refuse at Dumbuck Coup, within the Eastern District.

RENTON.—The following is the details of the work carried out within Renton Special Scavenging District:—

Loads Removed.	No. of Bins and Pits emptied.	Weight of Refuse. Tons. Cwts.		Miles Travelled.	Petrol Consumpt. Gallons.
1336	26,640	2203	8	2658	877 $\frac{1}{2}$

The average weight of each load was 33 cwts., and the average number of miles travelled per gallon of petrol was 3.04.

It will be noted that the work, if anything, continues to increase, but notwithstanding that, the scavenging, generally, has been carried out in a fairly satisfactory manner. A large quantity of waste paper and material which could very easily be destroyed by burning continues to give a great deal of extra work to the Department, and, with a view to endeavouring to reduce in bulk the quantity of this light material, handbills were printed and sent out to shopkeepers and householders throughout all the Scavenging Districts. The following is a copy of the handbill referred to:—

“ COUNTY OF DUNBARTON.

“ WESTERN DISTRICT.

“ SPECIAL SCAVENGING DISTRICT.

“ With the object of reducing as much as possible the cost of the removal of refuse, the District Committee earnestly appeal to the inhabitants to assist them by reducing the amount of refuse in their houses and shops to its lowest possible limit.

“ Such refuse as fruit, vegetable, and potato skins and parings should be burned in the kitchen grate, and waste paper, if soaked in water and pressed tightly with the hand, burns well in a fire. Regular attention to these methods would very much reduce the quantity of refuse to be disposed of by the Committee, besides effecting an appreciable saving in fuel.

“ Garden refuse should, according to its nature, be burned or buried. Much is now thrown out which, if dug into the soil, would enrich it.

“ The District Committee are confident that householders and shopkeepers will loyally co-operate in carrying out the above suggestions, which are made in the interest of the ratepayers.

“ THOMAS ALLAN,

“ *District Sanitary Inspector.*”

“ Health Department,
“ Alexandria.”

The new garage for housing the motor lorry, tools, &c., which has been erected by the Committee in Back Street, is now in use.

RHU.—The contract work in connection with Rhu Special Scavenging District was again carried out during the year by Mr. Alexander Lang, Oakbank, Rhu. Generally speaking,

the work has proceeded in a fairly satisfactory manner. The Committee were successful in getting a piece of ground suitable for a refuse depot in the vicinity of the old depot, and a new coup is now in operation there. A new roadway was formed and provision made for the drainage of subsoil water and a fence erected at a total cost of £164.

CRAIGENDORAN.—The scavenging work within this District continues to be carried out as in former years by Messrs. Waldie & Co., contractors, Helensburgh.

GARELOCHHEAD.—The scavenging work within this District has been carried out, since the District was formed, by Mr. Daniel Savage, contractor. The work has gone on in a fairly satisfactory manner, and slight improvements, such as abolition of ashpits and introduction of ashbins, have, from time to time, taken place. During the year the coup road was repaired and several lengths of pipe were laid to deal with subsoil drainage. Circulars referring to the destruction by burning of waste paper were also posted throughout this District.

SHANDON.—During the year a large number of Inspections were made and information obtained regarding the nature of accommodation and means of disposal within that area between the boundary of Rhu Scavenging District and the boundary of Garelochhead Scavenging District. A report was made up and submitted to the Public Health Committee outlining schemes whereby this area could be formed into a Scavenging District. As a result of Inspections made, I was convinced that the only way to preserve the amenity of this area, as far as the disposal of refuse was concerned, was that a Scavenging District should be formed. My report being considered by the Rhu and Garelochhead Sub-Committees, it was agreed not to proceed with the scheme in the meantime, but the Rhu Sub-Committee agreed to grant facilities to the householders within the Shandon area for the disposal of refuse under certain conditions at Rhu Coup. Circulars have been issued to the various householders intimating this decision to them.

SCAVENGING—GENERAL.

I would like to take this opportunity of pointing out that I am at the present time engaged in the collection of information relating to the possibility of forming Cardross, Arrochar, Tarbet, and Clynder into Special Scavenging Districts with a view to endeavouring to have the scavenging

WATER-CLOSETS, PRIVIES, &c., AND HOUSES WITHOUT WATER SUPPLY, &c.

The following particulars and Table No. XIX. is the information required by Circular (No. IX.. 1925) issued by the Scottish Board of Health, revised for the year 1928:—

Populous Places.	Remaining at end of year.			
	Privies, &c., converted to W.C.s.	Privies.	Earth- Closets.	Privy Middens.
Alexandria, - - -	17	19	—	89
Bonhill, - - -	2	46	—	29
Balloch and Jamestown, -	2	7	—	126
Renton, - - -	4	35	—	19
Total,	25	107	—	263

LIGHTING.

VALE OF LEVEN.—The number of lamps within this district is now increased to 455. an increase of 34 lamps as compared with the previous year. During the year the Committee decided to erect 15 new lamps from Broomley. Luss Road, to Balloch Station, and this has proved a great boon to the public in general, as this part of the District is very much frequented. As in former years, a number of lamps have, from time to time, been damaged by motor buses and motor cars, and claims to the value of £31 17s. 4½d. have been made on the parties concerned.

RENTON.—The number of lamps within this district is 90—80 double-burner lamps, 5 triple-burner lamps, 2 four-burner lamps, and 3 single-burner lamps. A number of lamps have, from time to time, been damaged by motor buses and motor cars, and claims to the value of £3 12s. 5d. have been made on the parties concerned.

The following statement gives detailed information relating to the number of mantles used throughout the season and the average life per mantle:—

District.	No. of Lamps.	No. of Mantles to Fit out Lamps.	No. of Mantles Used.	No. of Days Lit.	No. of Hours Lit.	No. of Mantles per Lamp Used.	Average Life of Mantles in Days.
Vale of Leven,	455	937	2930	252	2709	6.44	39.1
Renton, - -	90	168	436	252	2709	4.84	52

CARDROSS.—The introduction of electricity into the village of Cardross for public lighting has proved a great boon to the householders within the District. The scheme, since its

TABLE XIX.—DETAILS OF SANITARY CONDITIONS.

	No. of Houses with- out water supply and sink inside House.	No. of W.C.s serving Tenants.				No. of Dry Closets serving Tenants.				No. of Privy Middens serving Tenants.				No. of Ashpits serving Tenants.			
		2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	5
Alexandria, - - -	51	199	142	59	26	4	3	6	6	12	32	39	25	6	8	44	75
Bouhill, - - -	57	36	19	23	12	23	6	9	8	9	5	6	6	2	2	13	20
Jamestown and Balloch, -	39	16	7	6	...	3	4	...	...	...	3	3	120	2	2	7	74
Renton, - - -	108	37	47	67	41	2	3	1	7	4	...	1	11	1	1	2	18
Total, -	255	288	215	155	79	32	16	16	21	25	40	49	162	11	13	66	187

introduction, has given entire satisfaction. As a result of representations made it was decided to arrange to have the lamps throughout the District lit for an hour or two in the morning for certain periods of the season. During the year lamps were damaged by motor buses and motor cars, and claims to the value of £27 3s. 8d. were made on the parties concerned.

INCREASE OF RENT AND MORTGAGE (RESTRICTION) ACTS, 1920-1923.

The undernoted applications were received and certificates granted :—

Applications Received.	Certificates Granted.	Cases Pending.	Applications Withdrawn.
28	27*	2	1

* Includes 1 case pending from 1927.

NUISANCES.

The number of Inspections made in connection with the removal of Nuisances totalled 3426.

Intimations were served in connection with the removal of same.

PROCEEDINGS UNDER THE PUBLIC HEALTH AND OTHER ACTS DURING 1928.

I.—*Nuisances.*

	Number.
Complaints received, - - - - -	117
Intimations served under Section 19, - - - - -	457
Notices served under Section 20, - - - - -	—
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

II.—*Workshops.*

Inspections, - - - - -	105
Notices served under Section 2 (3) of Factory and Workshops Act, 1901, - - - - -	6
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

TABLE XX.—SHOWING NUMBER AND NATURE OF NUISANCES.

N U I S A N C E S.	ARROCHAR.			BONHILL.					CARDROSS.			DUNBAR- TON.		KIL- MARONOCK.		LUSS.			ROSNEATH.			RHU.				(A)	(B)	(B).
	Arrochar Village.	Other Parts of Parish.	TOTAL.	Alexandria.	Bonhill.	Jamestown.	Other Parts of Parish.	TOTAL.	Renton.	Other Parts of Parish.	TOTAL.	Parish.	TOTAL.	Kilmaronock.	TOTAL.	Luss Village.	Other Parts of Parish.	TOTAL.	Rosneath Village.	Other Parts of Parish.	TOTAL.	Rhu Village.	Garelochhead.	Other Parts of Parish.	TOTAL.	TOTAL ABATED.	TOTAL NOT ABATED.	
Ashpits abolished, - - - - -	1	1	25	...	25	13	13	26
Ashpits constructed or Ashbins provided, - - - - -	46	19	11	...	76	16	...	16	2	2	76	18	94
Ashpits repaired, - - - - -	2	20	...	22	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	9	15	24	
Accumulation of Refuse and Nuisance removed, - - - - -	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
Burns cleaned, - - - - -	
Byres and other Premises discontinued or improved, - - - - -	2	1	4	...	8	8	4	4	19	19	...	3	3	...	10	10	1	1	26	23	49
Common Stairs whitewashed or cleaned, - - - - -	6	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	6	
Courts repaired, paved, or cleaned, - - - - -	4	...	...	...	4	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	
Damp Houses shut up or repaired, - - - - -	1	2	1	...	4	7	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	11	...	11	
Defective Vents improved, - - - - -	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	
Defective Windows, - - - - -	2	1	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	
Dirty Houses, - - - - -	
Dirty Ashpits and Privies cleaned, - - - - -	9	...	...	1	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	1	10	
Drains cleaned, - - - - -	77	14	5	...	96	11	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	99	8	107	
Drains (new) constructed, - - - - -	27	30	3	3	63	19	6	25	1	1	5	5	2	1	3	2	...	2	15	15	104	...	104
Drains repaired, trapped, or ventilated, - - - - -	1	...	1	...	2	1	...	1	1	...	1	1	1	3	2	5
Dungsteads constructed or repaired, - - - - -	1	1	1	...	1
Eaves Gutters erected or repaired, - - - - -	11	3	3	1	18	5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	10	13	23	
Houses unfit for habitation, - - - - -	25	28	3	...	56	28	1	29	1	...	1	86	...	86
Hens, Pigeons, &c., improperly kept, - - - - -	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	
Overcrowding, - - - - -	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
Pigstyes discontinued, improved, or cleaned, - - - - -	
Privies abolished, - - - - -	23	9	...	...	32	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	36	...	36	
Privies and Ashpits repaired, - - - - -	7	2	2	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	6	11	
Privies constructed, - - - - -	
Sinks introduced, - - - - -	2	...	2	2	...	2
Sinks untrapped or defective, - - - - -	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
Soil Pipes and Waste Pipes ventilated or repaired, - - - - -	12	...	...	...	12	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	15	1	16	
Stables discontinued or improved, - - - - -	
Water-closets constructed or repaired, - - - - -	10	8	...	...	18	8	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	20	6	26	
Water supply improved, - - - - -	
Water supply provided, - - - - -	2	...	2	...	...	...	...	...	...	2	...	2	
Walls, Ceilings, Floors, and Roofs of Houses repaired, - - - - -	3	5	...	1	9	9	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	8	10	18	
Wash-houses provided or improved, - - - - -	8	2	...	...	10	5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	12	3	15	
Ventilation of Houses improved, - - - - -	3	...	...	...	3	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	5	
Ventilation of Stairs improved, - - - - -	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
Nuisances abated, - - - - -	230	110	36	3	372	126	14	140	4	4	14	14	7	3	10	2	3	5	17	1	2	20	563
Nuisances not abated, - - - - -	48	14	15	4	81	29	1	30	1	1	10	10	...	1	1	...	7	7	130	...
TOTAL, - - - - -	278	124	51	7	453	155	15	170	5	5	24	24	7	4	11	2	10	12	17	1	2	20	693

III.—*Tents and Vans.*

	Number.
Inspections, - - - - -	593

IV.—*Underground Dwellings.*

Reported to Local Authority, - - - - -	—
Notices to Owners (Section 74), - - - - -	—
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

V.—*Common Lodging-Houses.*

On Register at 31st December, 1928, - - - - -	—
Common Lodging-Houses belonging to the Local Authority, - - - - -	—
Inspections between 8 a.m. and 10 p.m., - - - - -	—
Inspections between 10 p.m. and 8 a.m., - - - - -	—
Intimations of Irregularities sent to Keepers, - - - - -	—
Cases of Infectious Disease reported to Medical Officer (Section 97), - - - - -	—
Unregistered Premises dealt with, - - - - -	—
Cases in which legal proceedings were taken (breaches of bye-laws, &c.), - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

VI.—*Houses Let in Lodgings.*

On Register at 31st December, 1928, - - - - -	—
Inspections, - - - - -	—
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

VII.—*Infectious Diseases.*

Visits of Inquiry, &c., - - - - -	296
Patients removed to Hospital, - - - - -	121
Persons removed to House of Reception, - - - - -	—
Notices served under Section 50 (2), \	347
Notices served under Section 53 (2), /	
Intimations to Education Authorities, Teachers, &c., - - - - -	300
Houses or premises disinfected, - - - - -	100
Sets of Clothing, Bedding, &c., disinfected or destroyed, - - - - -	103
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

VIII.—*Burials.*

	Number.
Burials undertaken in terms of Section 69, - - -	1

IX.—*Slaughter-Houses and Offensive Trades.*

Applications under Section 32 for sanction to establish, -	
Applications granted, - - - - -	
Applications under Section 33 for licence or renewal of licence, - - - - -	4
Applications granted, - - - - -	4
Public Slaughter-Houses (if any) belonging to Local Authority, - - - - -	—
Private Slaughter-Houses, - - - - -	4
Unlicensed Slaughter-Houses dealt with, - - - - -	—
Inspections of Slaughter-Houses, - - - - -	478
Inspections of other offensive Businesses, - - - - -	—
Number of such other offensive Businesses at 31st December, 1928, - - - - -	—
Cases in which legal proceedings were taken (breaches of bye-laws, &c.), - - - - -	—
Cases in which legal proceedings were successful, - - -	—

X.—*Unsound Food.*

Inspections under Section 43, { (a) Meat, - - - - -	—
{ (b) Other Foods, - - - - -	52
Seizures of Unsound Food, { (a) Meat, - - - - -	—
{ (b) Other Foods, - - - - -	3
Animals or Carcases or Articles of Food destroyed with owner's consent by or at the instance of the Sanitary Inspector, - - - - -	3
Cases in which owners of Unsound Food were prosecuted, -	—
Convictions in connection with above cases, - - -	—

XI.—*Analysis of Samples.*

	Sale of Food and Drugs Acts.	Condensed Milk Regulations.	Dried Milk Regulations.
	Number.	Number.	Number.
Samples procured for analysis, - - -	86	—	—
Certified to be genuine, - - -	80	—	—
Certified to be adulterated, - - -	6	—	—
Cases in which legal proceedings were taken, - - -	1	—	—
Cases in which legal proceedings were successful, - - -	—	—	—

XII.—*Rag Flock Act, 1911.*

	Number.
Samples procured for analysis, - - - - -	—
Certified to conform to Board's standard, - - - - -	—
Certified not to conform to Board's standard, - - - - -	—
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

XIII.—*Bye-laws.*

Inspections in carrying out Bye-laws relating to—

(a) Pigstyes, - - - - -	72
(b) Public Conveyances, - - - - -	—
(c) Buildings, - - - - -	236
(d) Cleansing in Special Scavenging Districts, - - - - -	10,950
(e) Other Sanitary Matters, - - - - -	840

MILK AND DAIRIES (SCOTLAND) ACT, 1914.

Since the introduction of the new Bye-laws framed by the Local Authority under the Milk and Dairies (Scotland) Act, 1914, the following premises have been inspected and reports on the defects found were issued to the dairyman, together with a duplicate copy, to give him an opportunity of forwarding same to his proprietor or factor :—

Napierston.	Woodside.	Tullichewan.
Bannachrie.	Drumfork.	Whiteleys.
Camiseskan.	Westerhill.	Dalmoak.
Barrs.	Ardmore.	Cardrossmill.
Aitken Barr.	Kilmalid.	Goosholm.
High Dykes.	Blairquhamrie.	Mid Auchencarroch.
Mid Gartocharn.	Ledrishmore.	Third.
East Auchencarroch.	Gartocharn.	Blairquhain.
Ardoch.	West Caldarvan.	Tullochan.
Blairinnich.	Ashfield.	Wards.
Rause.	Hillhead of Catter.	Auchencarroch.
Blairlusk.	Maviemill.	Rosbank.
Netherross.	Cullendoune.	Stuckenduff.
Peaton.	North Ailey.	Portkil.
Crossowen.	Barbour.	Knockderry.
Rosneath Home Farm.	Meikle Aiden.	Duchlagc.
South Ailey.		

Subsequent to the issue of the reports previously referred to, and before the end of the year the following farms were put into a condition to comply with the Dairy Bye-laws, and in the other instances the reports are being considered by the interested parties, and I am confident that when the cows leave the byre at the end of May the work of improvement will be proceeded with:—

Tullochan.	Drumfork.	Whiteleys.
Camiseskan.	Westerhill.	Barrs.
Ardmore.	Cardrossmill.	Aitken Barr.
Kilmalid.	Gooseholm.	Blairquhamrie.
Mid Auchencarroch.	Mid Gartocharn.	Third.
East Auchencarroch.	Gartocharn.	Blairinnich.
Ardoch.	Auchencarroch.	Rosbank.
Netherross.	Stuckenduff.	Peaton.
Meikle Aiden.	South Ailey.	

In addition to the above list of farms the following farms comply with the new Dairy Bye-laws:—Ladyton, Murroch, Crosslet, Garshake, West Cambusmoon, East Blairquhain.

Generally speaking, the work of improvement included (byres) the cementing of internal walls, building up wall-heads, improving the lighting, introducing inlet and outlet ventilation, making good defective trevisses, and repairing defective floors; (milkhouse) improving wall surfaces, introducing concrete shelves, providing metal gauze network in windows, and providing separate dairy scullery accommodation.

The detailed work involved in connection with this subject is considerable, and some time must necessarily elapse before all the farms are dealt with. A great handicap is due to the fact that a considerable portion of the work can only be undertaken when the cows are lying out, but notwithstanding that, however, it is gratifying to note that the reports are receiving the utmost consideration from the individuals concerned.

In my report last year I specially drew attention to the question of the production of a clean milk supply, and detailed the points necessary for the production of clean milk, and I would again take this opportunity of pointing out to the dairymen within the Western District of the County that the production of a clean milk supply undoubtedly rests to a considerable extent in their own efforts irrespective of structural defects which have not yet been made good. With a view to encouraging a clean milk supply the College of Agriculture, in conjunction with the District Committees, held a clean milk competition during the year, and sixteen farmers entered. The results on the whole were very satisfactory.

and it is hoped that the success of the first competition will encourage the holding of similar competitions with an increased number of entrants.

The following is a record of the registered number of cowsheds and the approximate number of cows in each Parish:—

Parish.	Cowsheds.	Cows.	Shops.	Vans.
Arrochar, - -	4	25	--	—
Bonhill, - - -	25	518	9	4
Cardross, - - -	22	654	3	2
Dumbarton, - -	7	231	—	—
Kilmaronock, - -	37	847	—	—
Luss, - - - -	11	193	—	—
Rosneath, - - -	15	281	—	—
Rhu, - - - -	13	222	—	—
Total, - - -	134	2971	12	6

In addition to the above, there are 82 cows in 24 unregistered premises throughout the District.

Under the Milk (Special Designations) Order, 1923, licences were granted to the undernoted after the milk had been sampled and proved to be of the required standard:—

Certified milk— Robert Howie, Drumfork Farm,
Helensburgh.

Grade A (T.T.) milk—Wm. R. Watt, Camiseskan Farm,
Helensburgh.

It was also agreed to renew the licence held by Mr. James Murray, Helensburgh, to sell Grade A (T.T.) milk from a van within the district of this Local Authority, and also to grant him a licence to sell certified milk also from a van within the district of this Local Authority.

Application was also received from Mr. Wm. Freeland, Helensburgh, for a dealer's licence to sell from a van certified milk. After consideration, the Committee agreed to grant the licence.

FOOD AND DRUGS ACT.

During the year 37 official and 36 test samples were submitted to the Analyst for analysis. The analyses show that

3 official and 3 test samples were adulterated. Three samples of milk were deficient in milk fat. Two samples of lard contained a percentage of cottonseed oil and 1 sample of Gregory's mixture was deficient in magnesia.

With regard to the adulteration of one of the milk samples, the Committee decided to take proceedings, and on the case being brought before the Sheriff proof was led and the Sheriff found the charge not proven.

With regard to the other milk samples which were deficient, the deficiency was so slight that the dairymen were warned.

In connection with the adulterated lards and Gregory's mixture, the Committee, after due consideration, decided not to prosecute.

The following is a record of the samples taken and results :—

Parish.	Record No.	Article.	Percent- age of Milk Fat.	Percent- age of Milk Solids other than Milk Fat.	Result.
Arrochar,	63	Sausage	—	—	Genuine
"	65	"	—	—	"
"	64	Margarine	—	—	"
"	66	"	—	—	"
"	67	Coffee	—	—	"
"	69	Flour	—	—	"
"	68	Margarine	—	—	"
Bonhill,	29	Sweet Milk	3'09	8'68	"
"	30	"	3'24	8'85	"
"	31	"	3'27	8'93	"
"	32	"	3'21	8'93	"
"	33	"	3'06	8'95	"
"	34	"	3'50	8'73	"
"	35	"	4'52	8'90	"
"	36	"	3'76	9'01	"
"	37	"	4'05	8'76	"
"	38	"	4'00	9'22	"
"	39	"	3'31	8'73	"
"	40	"	3'35	8'77	"
"	41	"	3'37	8'83	"
"	42	"	2'84	8'91	Adulterated
"	43	"	3'31	8'95	Genuine
"	44	"	3'42	9'29	"
"	2	"	3'91	8'90	"
"	3	"	3'26	8'89	"
"	4	"	3'47	9'01	"
Cardross,	7	"	3'81	8'72	"
"	8	"	3'52	8'98	"
"	9	"	3'91	9'00	"
"	45	"	3'93	9'10	"
"	46	"	3'41	8'87	"
"	47	"	3'50	8'73	"
"	48	"	3'59	8'71	"
"	70	"	5'27	9'26	"
"	54	Sweet Milk "Certified"	4'14	9'18	"
"	1	Sweet Milk Grade "A"	5'24	9'13	"
"	53	"	3'53	8'89	"
"	77	Vinegar	—	—	"
"	25	Sausage	—	—	"
"	28	"	—	—	"
"	71	Liquorice Powder	—	—	"

Parish.	Record No.	Article.	Percent- age of Milk Fat.	Percent- age of Milk Solids other than Milk Fat.	Result.
Cardross,	51	Lard	—	—	Adulterated
"	52	"	—	—	"
"	75	"	—	—	Genuine
"	19	Mince	—	—	"
"	20	"	—	—	"
"	21	"	—	—	"
"	22	"	—	—	"
"	23	"	—	—	"
"	24	"	—	—	"
"	26	Margarine	—	—	"
"	27	"	—	—	"
"	73	"	—	—	"
"	74	"	—	—	"
"	76	"	—	—	"
"	72	Gregory's Mixture	—	—	Adulterated
Kilmarnock, ..	5	Sweet Milk	3·84	8·55	Genuine
"	6	"	3·01	8·59	"
"	49	"	4·37	9·03	"
"	50	"	3·90	8·85	"
Luss,	61	Margarine	—	—	"
"	62	Green Peas	—	—	"
Rhu,	80	Sausages	—	—	"
"	82	"	—	—	"
"	10	Sweet Milk	3·86	8·60	"
"	11	Sweet Milk	2·56	8·90	Adulterated
"	12	"	2·68	8·72	"
"	14	"	3·89	8·87	Genuine
"	15	"	3·29	9·33	"
"	17	"	4·00	8·51	"
"	83	Coffee	—	—	"
"	79	Flour	—	—	"
"	78	Mincemeat	—	—	"
"	81	Pickles	—	—	"
"	84	Whisky	—	—	"
"	85	"	—	—	"
"	86	"	—	—	"
Rosneath,	16	Sweet Milk	3·21	8·53	"
"	18	"	4·38	8·76	"
"	13	Mince	—	—	"
Burgh of Cove and Kilcreggan, ..	55	Sweet Milk	3·88	8·80	"
"	56	"	4·00	8·81	"
"	57	"	4·46	9·21	"
"	58	"	5·43	9·2	"
"	59	"	3·69	8·77	"
"	60	"	4·11	8·99	"

Preservatives in Food Regulations.—Twelve official samples and 1 test sample were taken during the year and submitted to the Analyst for analysis. As a result of analysis the samples were found to be all genuine.

PUBLIC HEALTH (MEAT INSPECTION) REGULATIONS (SCOTLAND), 1923.

There are 4 private slaughter-houses within the Western District—2 in Alexandria, 1 in Cardross, and 1 in Gareloch-head. The new slaughter-house erected by the Vale of Leven

Co-operative Society has now been completed. The building has been carried out on modern lines, and the result is a great improvement on the old building formerly in use. Improvements have also been effected in the slaughter-house at Overton Street, Alexandria, and several slight improvements were also effected in the other two.

The following is an account of the animals slaughtered at the private slaughter-houses within the District :—

	Oxen.	Bulls.	Cows.	Heifers.	Calves.	Sheep.	Pigs.
No. of Carcases inspected,	313	—	—	155	62	1291	187
No. of Carcases seized wholly—							
1. Tuberculosis, -	—	—	—	2	—	—	—
2. Other Diseases, .	—	—	—	—	—	—	—
No. of Carcases of which portions were seized—							
1. Tuberculosis, -	2	—	—	1	—	—	—
2. Other Diseases, -	—	—	—	—	—	9	—
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Total weight of meat seized,	58	—	—	1314	—	192	—
Total, . . .	1564 lbs.						

SHOPS ACT, 1912.

During the year 264 Inspections were made under the Shops Acts, 1912 and 1921. As a result of routine Inspections and observations taken from time to time several slight contraventions were noted, and the attention of the offenders was drawn to the matter. This had the desired effect.

HOUSING OF SEASONAL WORKERS.

As in former years, the housing of potato diggers received the attention of the Department prior to the arrival of the workers and during the period when the diggers were in operation.

Generally speaking, every effort is made by the farmer to make his squads comfortable, but there are one or two points I would like to draw attention to, and these are—more consideration should be paid to the provision of storage accommodation for the foodstuffs belonging to the diggers. Properly constructed cupboards should be provided. In too many instances the makeshift accommodation provided for this purpose is entirely unsuitable. The other point I want to bring out is in connection with the fire provided for the workers for the cooking of food and drying of clothes in wet weather. The fire will very often be found to be in a cartshed

TABLE XXI.—SHOWING NUMBER OF SHOPS AND NATURE OF BUSINESSES CARRIED ON IN THE VARIOUS PARISHES THROUGHOUT THE DISTRICT.

PARISHES.	Bakers.	Butchers.	Chemists.	Clothiers and Tailors.	Cycle Agents.	Confectioners.	Dairies.	Dressmakers and Milliners.	Fish and Chip Shops.	Fishmongers.	Fruiters.	Furniture Dealers.	Grocers.	Hairdressers.	Hardwares and Dry-salers.	Ice Cream and Aerated Water Merchants.	Newagents and Stationers.	Saddlers.	Shoemakers.	Tobacconists.	Watchmakers.	Tea Rooms and Restaurants	Total.
Arrochar, -	1	2	—	—	—	2	—	1	—	—	—	—	3	1	—	—	1	—	1	1	—	2	14
Bonhill, -	19	10	6	6	2	31	9	20	5	2	13	6	21	6	10	8	13	1	6	19	3	7	223
Cardross, -	4	7	2	1	—	22	3	6	2	2	5	3	10	2	3	3	8	—	3	1	1	—	88
Dunbarton, -	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kilmaronock, -	—	—	—	—	—	2	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	4
Luss, -	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Rhu, -	4	1	—	1	—	2	—	3	—	—	2	—	6	—	—	—	5	—	—	—	—	—	24
Rosneath, -	2	—	—	1	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	5
	30	20	8	9	2	59	12	30	7	4	20	9	44	9	13	11	28	1	10	20	4	9	359

immediately beneath a loft which is used for a sleeping apartment. The result is obvious—the sleeping apartment at certain periods becomes filled with smoke, and is altogether very objectionable. Also there is the danger of an outbreak of fire. In several instances I have been successful in getting properly constructed fireplaces introduced provided with a vent, and this simple operation can very often be carried out at very little expense, and the advantage, not only to the workers but also to the farmer, is considerable from the old haphazard way of dumping the fire down in the middle of a cartshed. I have asked farmers to give these two points their careful consideration.

TENTS, VANS, SHEDS, AND HOUSEBOATS.

TENTS, VANS, AND SHEDS.—As in former years, camping again appealed to a large number of people. The principal camping grounds were again the foreshore between Cardross and Craigmendoran, and at various points on the foreshore round Garelochside, Whistlefield, and on Loch Lomondside north of Luss, and Tarbet. The sleeping accommodation provided consisted of 155 bell tents, 49 bivouacs, 73 cottage tents, 26 huts or wooden erections, and 6 marquees. The number of people living in this accommodation was 668 male adults, 324 female adults, and 379 children.

The period of occupation by the campers varied from three days to four to six months. The bulk of the campers, however, are only in camp for two weeks, and that during the Glasgow Fair holidays.

Due to proceedings taken in Court by the proprietors of the ground near Craigmendoran, on which a large number of campers lived, this part will not in future be occupied for camping purposes, and this now increases the necessity of recognised camping grounds being established.

Camping life, generally speaking, is a healthy one, and when properly carried out it should, in my opinion, be encouraged. It is surely not impossible to find a convenient site or sites within the Western District for this purpose. As I pointed out in my last Annual Report, the beauties of the District will always attract campers, and, that being so, I think every effort should be made to provide recognised camping grounds with provision made for the supply of pure and wholesome water and the provision of proper sanitary accommodation.

HOUSEBOATS.—Under the Bye-laws relating to Inspection of houseboats, 90 Inspections were made during the year.

The bulk of the houseboats are moored at Balloch, mostly in the River Leven, but some are on Loch Lomond. There are also houseboats moored on the Loch at Luss. The houseboats inspected were found to be occupied by 51 male adults, 63 female adults, and 8 children.

There are various types of houseboats, some very good, nicely furnished and equipped, and beautifully kept. There are others to which this description does not by any stretch of imagination apply.

Houseboat dwellers are very much like tent dwellers—they vary. It is satisfactory to record, however, that there was on the whole a slight improvement as against the conditions found prevailing during the first year in which the Bye-laws were in force, and it is anticipated that as time goes on and the Bye-laws become better known to the individuals concerned a further improvement will be recorded.

There was a difficulty in connection with the disposal of refuse from the various boats, and I made this matter the subject of a special report to my Committee. As a result of my report two large galvanised bins have been placed in convenient positions in the vicinity of Balloch Bridge. The refuse deposited in these bins is removed by employees of the Scavenging Department. While the cost of this service should be borne by the houseboat owners, the Committee decided as an experiment no charge should be made at the present time, but that they would consider the question of making a small charge at a later date. This point is not being lost sight of.

PRIVATE STREETS AND FOOTPATHS.

VALE OF LEVEN.—At the present time the Committee have under consideration the question of improving North Street, Steven Street, Lennox Street, all in Alexandria, and Croft Loan, Bonhill. The Road Surveyor has been asked to furnish estimates of cost for making the streets mentioned up to highway standard.

FACTORIES AND WORKSHOPS.

During the year 195 inspections were made of business premises within the District. (See Table No. XXIII.) Six notices were issued as a result of these inspections to the occupiers of the premises regarding cleanliness. There was nothing which required to be reported to H.M. Inspector of Factories. The total number of workshops at the end of the year was 99.

TABLE XXII.—WORKSHOPS (WESTERN DISTRICT).

TRADE OR BUSINESS.	Total Number.	Number of Workrooms.	Workshops employing both sexes.	Workshops employing Males only.	Workshops employing Females only.	Total Employees.	Women Employees.	Young Persons and Children.
Bakers (retail), - -	8	8	...	8	...	28	...	4
Dressmakers, } - -	13	13	...	...	13	30	30	2
Milliners, }								
Tailors, - - -	6	6	...	6	...	10	1	...
Joiners, Cartwrights, -	20	21	...	20	...	31	...	...
Plumbers, Tinsmiths, &c., - - -	14	14	...	14	...	35	...	2
Blacksmiths - - -	11	11	...	11	...	16	...	3
Shoemakers, - - -	13	15	...	13	...	15	...	1
Saddlers, - - -	1	1	...	1	...	1	...	...
Laundrykeepers, - -	2	2	...	...	2	4	4	...
Cyclemakers, - - -	1	1	...	1	...	2	...	...
Other Trades, - - -	10	10	1	9	...	26	1	3
Totals, - - -	99	102	1	83	15	198	36	15

SUMMARY OF INSPECTIONS FOR 1928.

Buildings (New), - - - -	236
Buildings (Dangerous), - - - -	32
Dairies, Cowsheds, and Milkshops, - - - -	262
Factories and Workshops, - - - -	105
Investigation of Infectious Disease, - - - -	296
Nuisances, - - - -	3,426
Pigstyes, - - - -	72
Seasonal Workers, - - - -	207
Shops, - - - -	384
Slaughter-houses, - - - -	478
Special Drainage Districts, - - - -	715
Special Lighting Districts, - - - -	4,272
Special Scavenging Districts, - - - -	10,950
Tents, Vans, and Sheds, - - - -	593
Inspections under Housing and Town Planning Acts, Rent Restriction Acts, &c., - - - -	1,520
	<u>23,548</u>

I have the honour to be,

GENTLEMEN,

Your obedient servant,

THOMAS ALLAN,
District Sanitary Inspector.

TABLE XXIII.—FACTORY AND WORKSHOPS ACT.—WESTERN DISTRICT.

TRADE OR BUSINESS.	ARROCHAR.			BONHILL.					CARDROSS.			DUNBARTON.		KILMARONOCK.		LUSS.			ROSNEATH.			RHU.				TOTAL.
	Arrochar and Tarbet.	Other Parts of Parish.	Total.	Alexandria.	Bonhill.	Jamestown.	Other Parts of Parish.	Total.	Ren ton.	Other Parts of Parish.	Total.	Dunbarton.	Total.	Kilmaronock.	Total.	Luss Village.	Other Parts of Parish.	Total.	Rosneath Village.	Other Parts of Parish.	Total.	Rhu Village.	Garelochhead.	Other Parts of Parish.	Total.	
Bakers, - - - - -	1	...	1	3	1	...	...	4	2	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
Blacksmiths, - - - - -	1	..	1	...	...	...	1	1	1	1	2	...	...	2	2	...	1	1	1	...	1	2	1	...	3	11
Bootmakers, - - - - -	1	...	1	4	1	...	...	5	2	3	5	...	...	1	1	...	...	...	...	...	...	...	1	...	1	13
Cycle Makers, - - - - -	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Dressmakers and Milliners, - - - - -	...	...	...	8	...	...	...	8	4	1	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
Joiners and Cabinetmakers, - - - - -	1	...	1	6	1	...	...	7	2	...	2	...	...	2	2	1	1	2	1	...	1	3	2	..	5	20
Laundries, - - - - -	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2
Plumbers, - - - - -	...	...	...	6	1	...	...	7	2	1	3	...	...	...	...	...	...	...	...	...	...	2	2	...	4	14
Saddlers, - - - - -	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Ship and Boat Builders, - - - - -	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Tailors, - - - - -	...	...	...	4	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	1	6
Miscellaneous, - - - - -	...	...	...	5	...	...	...	5	1	...	1	...	...	1	1	...	...	...	...	...	...	...	2	...	2	9
TOTALS, - - - - -	4	...	4	38	5	...	2	45	14	7	21	...	...	6	6	1	2	3	2	1	3	8	9	...	17	99
INSPECTIONS, - - - - -	4	...	4	40	6	...	2	48	16	8	24	...	...	6	6	1	2	3	2	1	3	9	9	...	17	105

THIRD ANNUAL REPORT OF VETERINARY INSPECTOR.

Municipal Buildings,
Dumbarton, 4th April, 1929.

To the Department of Health for Scotland
and the Western District Committee
of the County of Dunbarton.

LADIES AND GENTLEMEN,

I beg to submit herewith Annual Report of the Public Health work carried out by this Department during the year 1928.

Milk and Dairies (Scotland) Acts.—No administrative difficulties were encountered during the year, and in each case the owners afforded every facility to enable a thorough inspection of cattle and premises to be carried out.

Inspections were mostly made during the spring and autumn when the cows were housed, and a general improvement was observed in the cleanliness of byres, milkhouses, milkers, and cows. It was evident that a more conscientious effort was being made to produce milk of the highest quality.

Repairs were effected in several byres and milkhouses, but many byres are still defective, and in some cases this renders cleansing very difficult. To achieve a certain standard of cleanliness, however, it was pointed out that good buildings were only an aid to the production of a clean milk supply, and that in spite of the handicap at present of unsuitable buildings it was possible by careful attention to detail to produce milk of the highest standard. In the majority of cases the byres and milkhouses were well kept, but a few essential points, such as the daily cleaning of floors, bedding, gutters, and troughs, and the regular cleaning of walls, roofs, and windows in byres, were again emphasised in order to obtain the desired standard of cleanliness.

It is now a regular practice for milkers to wash their hands between each milking and to be neatly garbed in overalls. The cleanliness of utensils was on the whole satisfactory, and it was evident that where hygienic methods were introduced into routine work they soon become habitual and involve very little extra time or expense.

The introduction of drinking troughs into byres was still continuing throughout the District, with beneficial results.

A report was received from the Veterinary Inspector of Lanarkshire regarding a suspected animal in the herd of a dairyman removing from Lanarkshire to take up residence in this District. Permission was granted to admit the cow, and an examination of the animal was carried out on arrival. The Lanarkshire Authorities reported in due course that the guinea pig inoculated with a sample of milk taken from this animal had been killed and found normal. The condition of the animal had improved during this period, and restrictions imposed were withdrawn.

At the request of the Medical Officer of Health two dairy herds were examined on account of a complaint received from Glasgow regarding the high bacterial count found in the milk from the respective farms. An examination was carried out and a report of conditions submitted to the Medical Officer of Health. The cleanliness of the animals on one farm was found unsatisfactory and the defect remedied. The possible cause of the complaint on the other farm was attributed to the drainage system and other sanitary defects surrounding the milkhouse.

During the summer and autumn a clean milk competition was carried out under the auspices of the West of Scotland Agricultural College. Sixteen farms in the Western District took part in the test, which was of a very high standard. In order that all competitors would have the same advantage two preliminary samples of milk were taken and reported upon, and advice, where necessary, was given regarding reorganisation of methods. Five samples were taken from each farm for the test, three by the College representatives, and two, which only counted for half of the marks of the others, by the farmers themselves. The purity of the milk was judged by determining the bacterial content, coliform bacteria present, and the fermentation produced on keeping the milk at 100° F.

Marks were also given for methods and buildings. Of the sixteen competitors, twelve gained over 1400 marks out of a possible of 2300, and were awarded certificates.

This compares very favourably with other Counties.

To enable dairymen to maintain the standards attained, the College arranged to receive and test samples at intervals of four or six weeks, as desired, at a reduced fee of 2s. per sample or £1 per year. Those who entered for the test have taken advantage of this scheme, and it is hoped many more will be induced to do likewise.

Inspection of Cows.—In accordance with regulations in

the Western District, one Inspection of cattle in all registered dairies and in premises not registered was carried out during the year, with additional visits as the occasion arose. The Inspections were as follows, viz. :—

Number of registered dairies,	-	-	-	134
.. .., cows inspected,	-	-	-	2971
.. .., non-registered premises,	-	-	-	24
.. .., cows inspected,	-	-	-	82

A report of each visit was sent to the Clerk to the Local Authority for the information of the Medical Officer of Health and the Sanitary Inspector.

Cleanliness, Health, and Diet of Cows.—The general condition, cleanliness, and health of cattle throughout the District was found on average good. A distinct improvement in cleanliness was noted in several cases. The washing of cows' udders prior to milking is now general in all dairies. The clipping of tails, quarters, and flanks was in the majority of cases regularly done. In some cases where the cleanliness of cows was unsatisfactory inspections were continued until conditions improved.

The Western District of the County being a heavy milk producing area, the diet supplied to the majority of milking herds was of a high quality.

The number of animals detected with diseased udders during Inspections, apart from tuberculosis, was as follows, viz. :—

Atrophy,	-	-	-	-	-	-	132
Mammitis,	-	-	-	-	-	-	9
Induration (non-tuberculous),	-	-	-	-	-	-	23
Eruptions on teats,	-	-	-	-	-	-	20
<hr/>							
Total,	-	-	-	-	-	-	184

The diseased animals were removed permanently or temporarily from the milking herds as the cases required, and the milk either destroyed or used for feeding calves or pigs.

This shows a decrease in diseased conditions of the udder as compared with the previous year's report.

Tuberculosis among Dairy Cows.—The number of cows found tuberculous on clinical examination of herds was

fifty-one, and these were slaughtered under the Tuberculosis Order of 1925 as follows, viz. :—

Class of Animal.	Tuberculous Emaciation.	Chronic Cough.	Total.	Post-Mortem Adv.	Examination Not Adv.
Cows in Milk,	3	9	12	6	6
Other Cows,	8	27	35	23	12
Other Bovine Animals,	1	3	4	4	
	12	39	51	33	18

A slight decrease was noted in the number of animals dealt with under the Tuberculosis Order as compared with the previous year.

Samples of milk taken from fifteen cows with indurated udders were submitted to the Laboratory for examination. No trace of tubercle bacilli was found in either case. Three samples were certified to contain Streptococci, and the Local Authority and the Medical Officer of Health were notified accordingly.

The tuberculin test under section 22 of the Act was not applied to any animals during the year.

Milk (Special Designations) Order (Scotland), 1923.—Under the above Order, the tuberculin tests were applied to two dairy herds in this District. All the animals passed the prescribed tests. A renewal licence was granted in the one case to sell Grade A (T.T.) milk, and a licence was issued in the other to sell certified milk. These two herds are self-supporting, which obviates any danger of tuberculosis being brought into the herds from an outside source. The cattle in both herds are a high-class quality of Ayrshire cows.

Meat Inspection.—Supervision of private slaughter-houses in Vale of Leven, Garelochhead, and Cardross was maintained throughout the year. My attendance for examination of carcasses was requested on seven occasions by the Sanitary Inspector, who acts as Detention Officer.

I am, GENTLEMEN,

Your obedient servant,

JAMES McDUGALL,
Veterinary Inspector.

DISTRICT ENGINEER'S REPORT.

SPECIAL WATER SUPPLY DISTRICTS.

GARELOCHHEAD SPECIAL WATER SUPPLY DISTRICT.—The supply within the Special District continues to give general satisfaction, although complaints have been received periodically regarding discoloration of the water. As there is no proper system of filtration at the works, efforts have been made to deal with the complaints by systematic scouring of the mains, and this method has been fairly successful.

In April, when the height of the spillway was raised to complete the improvements undertaken last year, a leakage was discovered in the embankment. Meantime it has been decided to take no further action, but observations are taken weekly, and the leakage, so far, has shown no further increase in quantity. During the year a scale of special charges was approved of, and although in the application thereof considerable criticism has been received, it is hoped that the scale will distribute more evenly the cost of water which is used for other than domestic purposes. It was also decided to abolish the system whereby repairs were carried out on private connections at the expense of the District, and the new arrangement is working satisfactorily. A rain gauge has been installed, and monthly readings are reported to the Committee.

RHU SPECIAL WATER SUPPLY DISTRICT.—The condition of the supply within the Special District compares favourably with previous years. Here, again, however, complaints were received regarding the colour of the water, and these were dealt with successfully by scouring the mains. Numerous minor repairs were executed, and improvements were made at the filter house and clear-water tank.

Consideration was given to a circuit main at Ardenconnel, and the matter will probably be decided at an early date. A request was also received for a water supply for a new house near the Police Station, and, as there may be future development in this area, the Committee have under consideration the laying of a new main. Considerable trouble has been occasioned by moles on the embankments, and new arrangements were made during the year for this purpose, which promise to be quite successful. A rain gauge has also

been provided for this District, the readings of which should prove to be of statistical interest.

CARDROSS SPECIAL WATER SUPPLY DISTRICT.—During the summer months there is always the possibility of a shortage of the water supply within this District, and in May, due to a prolonged dry period, intimation was sent to the consumers regarding the conservation of the supply.

A complaint was made to the Scottish Board of Health by the owner of Kilmahew Cottages regarding the inadequacy of the supply, which resulted in Mr. Ross Young, an Engineering Inspector from the Board, making an inspection of the works. In a subsequent report Mr. Young remarks: "I think it is only right to state that, from my investigations, I came to the conclusion that the water supply to Cardross is on none too good a basis, and that, apart from other points which I shall refer to later, there is a chance of a distinct shortage of water taking place in a dry summer." Arrangements were made to improve the supply to Kilmahew Cottages, but the general condition of the undertaking is still unsatisfactory.

The consideration given last year to the supply to Kirkton Farm was continued, and ultimately a new 3-inch diameter main was laid in the Darleith Road. The work was carried out by Mr. James Dow, Renton, at a cost of £197 19s. 3d., and the supply in this section is now satisfactory. An application for a supply was received from the tenant of Rosebank, situated outwith the District. Due to the condition of the mains and lack of pressure, the request could not be granted. The Sub-Committee also approved of a new 3-inch diameter main at the Housing Scheme (Second Development), at an estimated cost of £45.

Numerous repairs were carried out at Asker Farm. The repairs were chiefly confined to the dwelling-house, but it is obvious that the outbuildings will also require serious consideration at an early date.

RENTON SPECIAL WATER SUPPLY DISTRICT.—During the year the District suffered a great loss by the death of Mr. Charles Brown, the Water Superintendent. Mr. Brown had held the position for thirty years, and had been intimately associated with all the work that had been carried out during that period. The vacancy thus caused was filled by the appointment of Mr. James W. Rankine, from the Middle Ward of Lanarkshire, who commenced duty on the 10th April.

The water supply within the District continues to give

general satisfaction. There is, however, a large amount of wastage, and efforts are being continually made to overcome this trouble. Improvements were carried out at Carnan Cottage during the year, and considerable alterations were made at the filters, including an extension of the sand storage and washing areas. To protect the by-pass water a dirt box was installed at the cost of £30 6s. 4d., and it was also agreed to provide a new measuring gauge below the filters.

In connection with the further development at Tontine Park Housing Scheme the Sub-Committee approved of extensions to the water main at an estimated cost of £240. A new store was also erected on ground which had been acquired by the Sub-Committee in Back Street, and the storage of material at this convenient central building will be of considerable benefit.

VALE OF LEVEN SPECIAL WATER SUPPLY DISTRICT.—An excellent supply of water from Loch Finlas and Overton Reservoirs continues to give every satisfaction within this District, and the plant and fittings are in good condition. The house at Arnburn was completed during the year, and occupied by the reservoir-keeper at Loch Finlas.

Several properties in Bonhill until now have received their supply from the Ladytoun Well. This well was taken over from the Braehead Water Association in 1882, but it was thought desirable to discontinue the use of this supply, and this has accordingly been arranged. The Cemetery Road was during the year reconstructed, and the Sub-Committee agreed to pay £200 as their proportion of the cost of the work on condition that the road would thereafter be taken over as a public highway. Improvements were made to the fencing of the gauge well at Overton Reservoir, and a supply, by meter, was granted to Rosebank Farm.

In connection with the additional housing developments at Millburn and George Street, Bonhill, it will be necessary to lay new water mains, the estimated cost of which is £900.

SPECIAL DRAINAGE DISTRICTS.

RHU SPECIAL DRAINAGE DISTRICT.—During the year the work in connection with the construction of the main sewers within the District was completed. To deal with the drainage in Spy's Lane a supplementary estimate of £300 was approved of, and the total cost of the completed scheme amounted to £3151 14s. Even at this early date it is apparent that the systematic conveyance of the sewage to a few central points will be of considerable benefit to the District.

It might be mentioned, however, that a number of the existing sewers were found to be in a very unsatisfactory state, and it will take some time and will involve a certain amount of expenditure before these sewers are in good condition.

RENTON SPECIAL DRAINAGE DISTRICT.—The sewers in Back Street and Leven Street, which were mentioned in last year's report, have again occasioned a certain amount of trouble. By weekly flushing, however, no serious defect has arisen, but it is hoped to improve on this arrangement at an early date. The further development of the Housing Scheme at Tontine Park will entail extensions of the existing sewers, and the Sub-Committee have approved of an estimated expenditure of £300 for this purpose.

During the year complaints were made regarding the outfall sewer at Burn Street, and a report and estimate was submitted regarding a suggested improvement. It was agreed, however, that the work would not be proceeded with meantime.

VALE OF LEVEN SPECIAL DRAINAGE DISTRICT.—During the year the condition of the sewers has been fairly satisfactory. The sewer at Overtoun Street, which was referred to in last year's report, has now been repaired. It was found to be half-full of silt and gravel, and to prevent a recurrence of this trouble new gullies were installed in the Cemetery Road during its reconstruction.

In connection with the fourth development of Millburn Housing Scheme further sewers will be necessary, and the Sub-Committee have approved of an estimated expenditure of £750. It might be noted that the sewage from this area will require to be taken to the outfall sewer in Dillichip Loan, which is the property of Renton Special Drainage District. An arrangement has been come to between the two Districts, and the work will shortly be put in hand.

In connection with the proposed drainage of The Terraces, Jamestown, a report was prepared indicating how this area could be served. The estimated cost of the works was £11,500, and the matter is still under consideration.

PRIVATE STREETS AND FOOTWAYS.

Consideration was given to the condition of Croft Loan and Arthurstoun Road, Bonhill, and North Street and Steven Street, Alexandria. No repairs have yet been executed, but the matter is receiving attention.

A portion of Station Road, Craigendoran, from the north-west end to the end of the last feu at the Station—a distance of 305 yards—was added to the list of highways. The work was carried out by the Road Department.

GENERAL.

CINEMATOGRAPH ACT, 1909.—During the year renewals were granted in respect of all the existing licences. The following is a list of the premises:—

- No. 1. Strand Cinema, Bank Street, Alexandria.
- No. 2. Empire Theatre, Steven Street, Alexandria.
- No. 3. Vale of Leven Public Hall, Alexandria.
- No. 4. Renton Public Hall Buildings, Renton.

In the case of the Strand Cinema, the licence was withheld until the structural alterations, then in contemplation, were completed, and the licence for the Public Hall, Alexandria, was renewed subject to proposed improvements being carried out satisfactorily. In both instances the alterations, which have now been completed, are a considerable improvement on the previous arrangements.

The premises, in all cases, were well conducted throughout the year, and the Regulations were given the necessary attention.

FIRE BRIGADES.—Throughout the year the services given by the Burgh Fire Brigades have been satisfactory both as regards response and efficiency. The Auxiliary Brigades have also given general satisfaction, but in the case of the Vale of Leven Auxiliary Fire Brigade difficulties were encountered in recruiting the Brigade to full strength. Due to that fact and to the size of the area, the equipment, and certain other factors, it was resolved to have this Brigade disbanded.

The number of fires attended by each Brigade is shown in the following table:—

Helensburgh Fire Brigade,	-	-	5
Dumbarton Fire Brigade,	-	-	4
County Auxiliary Fire Brigades—			
Vale of Leven,	-	-	1
Renton,	-	-	3
Garelochhead,	-	-	2
Rhu,	-	-	6
			<hr/>
			15

The service of the Brigades were required on fifteen occasions, on nine of which outbreaks of fire were dealt with by the Burgh Fire Brigades and the remainder by the County Auxiliary Fire Brigades.

The fire plugs were periodically examined, and a number of minor alterations and improvements have been carried out.

WATER SUPPLY.—Further consideration was given to the question of a water supply for Clynder, but intimation was received that the Unemployment Grants Committee could not meantime give a grant for the scheme.

In the course of the year a Water Supplies Committee was formed, and this Committee undertook the consideration of a report which had been prepared on the whole question of water supply within the Western District, and particularly the feasibility of continuing the existing policy of supplying water through the formation of Special Water Supply Districts under the Public Health (Scotland) Act, 1897.

In this respect there would appear to be much which requires to be done. Such places as Clynder and Gartocharn are in a very unsatisfactory state as regards water supply, and at Cardross the condition of the undertaking is not much better.

The Committee have adjourned consideration of the report, pending the submission of a second report on the financial aspect of the proposed recommendations.

COUNTY OF DUNBARTON.

EASTERN DISTRICT.

LIST OF STAFF.

District Medical Officer.

THOMAS LAUDER THOMSON, M.D., D.P.H.

Assistant Medical Officer.

EDWARD NEIL REID, M.A., B.Sc., M.B., D.P.H.

District Sanitary Inspector.

JOHN D. M'KENDRICK.

Assistant Sanitary Inspectors.

P. J. C. M'KENZIE. | JOHN L. MOWAT.
WILLIAM ARTHUR.

District Engineer.

D. T. H. MACLENNAN, A.M.I.C.E.

Assistants.

JOHN NICOLSON. | WILLIAM D. SHORT, B.Sc.¹

Nurses.

JANET TURNBULL. | J. CLARA MACBETH.

Office Clerks.²

JOSEPH BAIRD. | JESSIE M'EWAN.

- ¹ Commenced duty 4th January, 1928.

² Clerks in Sanitary Inspector's Office.

The Medical Officer and Assistant Medical Officer are also Tuberculosis Officer and Assistant Tuberculosis Officer respectively.

The Medical Officers of the Education Authority (Dr. M. M. L. Cathels and Dr. A. D. Cowan) have been appointed Assistant Medical Officers of Health for purposes of administration.

EASTERN DISTRICT.

VITAL STATISTICS.

POPULATION.—The Registrar-General's estimate of the population at the middle of 1928 amounted to 23,187, which is 127 less than last year. On the other hand, an estimation made from the occupied houses as ascertained from the Valuation Roll gave a population of 26,136, which is 78 over the similar estimate for last year and 2949 more than the Registrar-General's figure for 1928.

BIRTHS.—The number of births allocated to the Eastern District, after correction for transfers, was 476, as compared with 458 in 1927. The rate per 1000 of the population was, therefore, 20·5, which is slightly higher than in 1927, but lower than in 1926, when the rate was 22·1.

DEATHS.—The number of deaths registered in the District was 363, but 123 of these were transferred to other districts, while 61 were transferred in, being deaths of persons usually resident in the District. The corrected number, therefore, was 301, and the corrected death-rate was accordingly 13·0 per 1000 of the population, as compared with 12·1 in the previous year. The chief causes of death were—Heart Disease, 44; Cancer, 39; Apoplexy, 31; Pneumonia, 22; Bronchitis, 15; Tuberculous Diseases, 15; Violent Deaths, 14; and Influenza, 12.

The deaths from Pulmonary Tuberculosis numbered 8; this produces a death-rate of ·35 per 1000 of the population, as against ·34 in 1927, ·68 in 1926, and ·55 in 1925. The number of deaths from Non-Pulmonary Tuberculosis was 8, which is equivalent to a death-rate of ·35, compared with ·22 in 1927, ·34 in 1926, and ·55 in 1925.

INFECTIOUS DISEASE.

Four hundred and twenty-four cases of infectious disease were notified during the year, as against 346 cases in 1927.

Scarlet Fever.—One hundred and thirty-nine cases of this disease were notified during the year, as against 86 in 1927. There was a marked prevalence of the disease in the Cumbernauld Parish, 50 cases in all being notified from

TABLE XXIV.—COUNTY OF DUNBARTON.—EASTERN DISTRICT.—STATEMENT SUPPLIED BY THE REGISTRAR-GENERAL GIVING VITAL STATISTICS FOR 1928.

NUMBERS.		RATES PER 1000 OF ESTIMATED POPULATION.	
Births	(Corrected for Transfers), -	Birth Rate (Corrected for Transfers), -	20.5
Do. Illegitimate (do.), -	-	Marriage Rate (Uncorrected), -	6.0
Marriages (Uncorrected), -	-	Death Rate—All Causes (do.), -	15.7
Deaths (do.), -	-	Do. (Corrected for Transfers), -	13.0
Do. (Transferred Out), -	-	Do. (Corrected for Transfers and adjusted for Age and Sex Distribution), -	13.4
Do. (do. In), -	-	Do. — Tuberculosis, Respiratory System (Corrected for Transfers), -	0.35
Do. (Corrected), both Sexes, -	-	Do. — All Tuberculosis (Corrected for Transfers), -	0.69
		Do. — Principal Epidemic Diseases (Corrected for Transfers), -	0.91

Population—Census 1921, 23,808; Estimated to middle of 1928, 23,187.

Infantile Mortality Rate (Deaths of Children under One Year per 1000 Births), corrected, 78.

Illegitimate Rate (Illegitimate Births per 100 Total Births), corrected for Transfers, 5.9.

TABLE XXV.—COUNTY OF DUNBARTON.—EASTERN DISTRICT.—STATEMENT OF CAUSES OF DEATH
(Corrected for Transfers) FOR 1928, SUPPLIED BY THE REGISTRAR-GENERAL.

CAUSES OF DEATH.	ALL AGES.			AGE.										
	Total.	M.	F.	—1	5—	10—	15—	25—	35—	45—	55—	65—	75—	85 and over.
Enteric Fever, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles, - - - - -	7	4	3	1	...	...	...	...	...	...	...	...	...	...
Scarlet Fever, - - - - -	1	1	...	4	...	...	...	...	...	...	...	...	...	...
Whooping-cough, - - - - -	8	4	4	...	...	...	...	...	...	...	...	...	...	...
Diphtheria, - - - - -	1	1	...	1	...	...	2	...	...	3	...	4	2	...
Influenza, - - - - -	12	6	6	1	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica, - - - - -	1	1	...	1	1	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis, - - - - -	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Epidemic Diseases, - - - - -	2	1	1	...	...	...	...	...	...	1	2	1	...	...
Tuberculosis (Respiratory System), - - - - -	8	5	3	...	...	1	2	1	1	1	2	...	...	...
Tuberculosis Meningitis, - - - - -	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis of Intestines and Peritoneum, - - - - -	5	3	2	1	1	...	2	1	...	...	...	...	...	...
Other Tuberculous Disease, - - - - -	1	1	...	...	...	...	1	1	2	5	12	11	5	2
Malignant Tumours, - - - - -	39	16	23	...	...	...	...	...	...	...	...	...	...	...
Rheumatic Fever, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis, - - - - -	2	1	1	...	...	...	...	...	...	...	...	...	...	...
Apoplexy, - - - - -	31	10	21	1	...	...	...	...	...	...	...	...	...	...
Heart Disease, - - - - -	44	24	20	...	...	...	1	1	3	3	6	13	7	1
Disease of Arteries, - - - - -	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Bronchitis, - - - - -	15	7	8	5	...	...	1	1	...	1	1	2	...	1
Pneumonia, - - - - -	22	16	6	3	2	...	...	1	1	2	1	4	1	1
Other Diseases of Respiratory System, - - - - -	8	3	5	3	...	...	...	...	...	...	...	...	...	...
Diarrhea and Enteritis (under 2 years), - - - - -	4	2	2	3	...	...	...	...	...	...	...	...	...	...
Appendicitis, - - - - -	2	1	1	...	...	...	...	...	...	...	...	...	...	...
All Diseases of Liver (not Malignant), - - - - -	2	1	1	...	...	...	...	...	...	1	...	...	...	...
Nephritis (Acute and Chronic), - - - - -	1	...	1	...	...	...	...	...	...	1	1	...	...	...
Puerperal Sepsis, - - - - -	2	...	2	...	...	...	...	...	2	...	...	...	...	...
Other Diseases and Accidents of Pregnancy and Parturition, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Early Infancy and Malformation, - - - - -	4	...	4	...	...	...	1	...	3	...	...	...	...	...
Suicide, - - - - -	11	5	6	11	...	...	...	...	...	...	...	...	...	...
Other Violent Deaths, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Defined Diseases, - - - - -	14	7	7	1	...	1	1	2	2	2	2	2	...	1
Ill-defined or Unknown, - - - - -	47	24	23	1	...	1	...	...	4	4	6	10	10	4
	3	2	1	...	...	...	...	...	...	...	...	2	1	...
All Causes, - - - - -	301	146	155	37	5	3	11	9	21	25	43	75	40	11

this area during the year. There were 13 cases in January, after which cases were reported at intervals up to the end of June. The disease seemed to have entirely died down, when in September further cases were reported, and from October to the end of December 21 cases were dealt with. In spite of careful inquiry, no common source could be detected. In the other parishes the numbers were smaller, as shown in Table XXVI. In the East Kilpatrick Parish the numbers were augmented by outbreaks in the County Branch of the Sick Children's Hospital (3 cases) and in the Hillfoot Holiday Home (4 cases).

Only one outbreak occurred at a dairy farm. Prompt action was taken, and, as far as could be ascertained, the disease did not spread to any of the customers. It was not considered necessary to stop the milk supply, but arrangements were made to have the supply pasteurised as a precautionary measure.

Diphtheria.—Fifty-seven cases of this disease were notified during 1928, as against 50 in 1927. Although 28 of these cases occurred in the West Kilpatrick Parish, there was no definite outbreak, the cases being scattered over the various villages in the parish. In the East Kilpatrick Parish a case occurred in the Sick Children's Hospital and a further one in the Hillfoot Holiday Home. No case of the disease occurred in a dairy farm during the year.

Enteric Fever.—Four cases of Typhoid infections were notified during 1928. These cases were quite unconnected, and no definite source of infection could be traced. Of the 4 cases, 1 gave a reaction in the blood for Typhoid, 2 for Paratyphoid B, and 1 for both Typhoid and Paratyphoid B.

Puerperal Fever.—Six cases were notified. These are referred to in the section of the report dealing with Maternity Service and Child Welfare.

Pulmonary Tuberculosis.—Thirty-nine cases (22 males and 17 females) were notified as suffering from Pulmonary Tuberculosis during the year, and, at the end of the year, 8 had died; 3 had left the district; in 6 cases the diagnosis was not verified; and 3 were still under observation as doubtful. It should be noted that the total of 39 cases includes 9 patients from Woodilee Mental Hospital, whereas the number of deaths, namely, 8, does not include 2 deaths in this institution. Fourteen cases were sent to sanatoria for treatment, and 2 were given domiciliary treatment. Tubercle

TABLE XXVI—EASTERN DISTRICT.

CASES OF INFECTIOUS DISEASE COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER DURING THE YEAR 1928.

Parish.	Enteric Fever.	Scarlet Fever.	Diphtheria and Mem. Group.	Erysipelas.	Puerperal Fever.	Primary Pneumonia.	Influenza Pneumonia.	Chickenpox.	Cerebro Spinal Meningitis.	Encephalitis Lethargica.	Dysentery.	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Other Tuberculosis.	Totals.
Cumbernauld, - - -	...	50	10	6	3	7	2	12	1	...	...	...	2	5	98
Kirkintilloch, - - -	1	31	9	11	...	10	4	3	...	...	...	...	16	1	86
East Kilpatrick, - - -	2	29	10	4	...	15	1	4	...	...	1	1	6	...	73
West Kilpatrick, - - -	1	29	28	8	3	31	3	26	1	1	...	4	15	16	166
Totals, - - -	4	139*	57	29	6	63	10	45	2	1	1	5	39	22	423
Removed to Hospital, - - -	3	123	51	6	4	26	2	2	2	...	...	...	14	6	239
Percentage removed to Hospital,	75	88.5	89.5	20.7	66.6	41.3	20	4.4	100	.	...	..	36	27.2	56.5

* One Patient had also Diphtheria on admission to Hospital.

TABLE XXVII.—EASTERN DISTRICT.
SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASE OCCURRING IN
HOUSES OF DIFFERENT SIZES IN 1928.

Disease.	No. of Apartments.					Cases in Institutions.	Total No. of Cases.
	One.	Two.	Three.	Four.	Five.	Over Five.	
Enteric Fever, -	...	1	1	...	...	1	4
Scarlet Fever, -	5	60	30	11	7	19	139
Diphtheria, -	2	27	13	3	5	5	57
Erysipelas, -	...	10	7	2	1	2	29
Puerperal Fever, -	...	5	...	...	1	...	6
Dysentery, -	...	...	1	...	...	...	1
Cerebro-Spinal Meningitis,	1	2	..	...	...	...	3
Encephalitis Lethargica, -	...	...	1	...	...	...	1
Chickenpox, -	2	28	4	2	1	6	45
Influenzal Pneumonia, -	1	4	.	1	...	2	10
Primary Pneumonia, -	5	30	15	2	2	7	63

TABLE XXVIII.—ADMISSIONS TO DUNTOCHER HOSPITAL, 1928.

AGE IN YEARS.	0-5		5-10		10-20		20-30		30-40		40-50		Over 50.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	BOTH
<i>Scarlet Fever.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Enteric Fever.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Diphtheria.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Erysipelas.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pneumonia.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Measles.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Measles and Pneumonia.</i>																
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Whooping Cough & Pneumonia.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Whooping Cough.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Chickenpox.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cerebro-Spinal Meningitis.</i>																
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals,	24	24	20	30	9	14	7	9	4	2	1	1	69	79	148	

TABLE XXIX.—ADMISSIONS TO LENNOX JOINT HOSPITAL, 1928.

	AGE IN YEARS.						Totals.									
	0-5		5-10		10-20		20-30		30-40		40-50		Over 50.		Totals.	
<i>Scarlet Fever.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Diphtheria.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Enteric Fever.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Erysipelas.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pneumonia.</i>																
Recovered,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Meningitis.</i>																
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cerebro-Spinal Meningitis.</i>																
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Infantile Paralysis.</i>																
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Encephalitis Lethargica.</i>																
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Tuberculosis.</i>																
Discharged,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remaining,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Died,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

bacilli were present in the sputum of 13 of these patients. Three X-ray examinations were carried out, 1 with positive and 2 with negative result.

Non-Pulmonary Tuberculosis.—Twenty-two cases (15 males and 7 females) of Non-Pulmonary Tuberculosis were notified during the year, and by 31st December 5 had died, and in 5 cases the diagnosis was not verified. It should be noted that the total of 22 cases includes 1 patient from Woodilee Mental Hospital, whereas the number of deaths, namely, 5, does not include 1 death in this institution. Five of these patients were sent to institutions for treatment, and 1 received domiciliary treatment. One X-ray examination was carried out, giving a positive result.

HOSPITAL ACCOMMODATION.

DUNTOCHER JOINT HOSPITAL.—Visits were paid to this hospital from time to time during the year. I have no comment to make regarding the administration. The ambulance and disinfectors were kept in good working order. Table XXVIII. shows the number of cases treated during the year.

LENNOX JOINT HOSPITAL.—The pavilion for which the Board of Health's sanction was obtained last year was in course of construction during the year. When completed it will be of great advantage in the administration of the hospital. As will be seen from Table XXIX., no fewer than 10 different diseases were isolated in the wards during 1928.

WATER SUPPLY.

As will be seen from Table XXX., 16 of the 18 samples taken for analysis during 1928 were from dairy farms. In four instances the supplies were not satisfactory, in three cases due to the presence of nitrates, while the fourth was definitely polluted by sewage, and it is only fair to say was not in use at the time of analysis.

In one instance the plumbo-solvent action of a water was inquired into, and on an unfavourable report being obtained it was suggested that the water should be conveyed in copper pipes, so as to avoid the possibility of lead poisoning.

A very important case relating to the supply of water to individual houses was decided during the year by the Sheriff-Principal for the County. The following are the general facts:—

Following on the enlargement of the Bowling Special

Water District in 1927, the Eastern District Public Health Committee called upon certain proprietors to introduce water into their houses for the use of the tenants. Exception was taken to this request by certain of the proprietors, amongst whom were the appellants in the case referred to.

The demand of the Local Authority was based on section 40 of the Housing and Town Planning Act of 1919, which is as follows:—

“ If any occupied house within the district of a local authority other than the local authority of a burgh is without a proper supply of wholesome water, the local authority shall require the owner to obtain such supply and to introduce it into the house if it is reasonably practicable so to introduce it, and, if it is not, then to provide for such a supply immediately outside the house, or as near thereto as is reasonably practicable, and to do all such works as may be necessary, and if the owner fails, after due notice, within three months, or such extended period as the local authority may prescribe, to carry out such requirement, the local authority may themselves do the necessary works, and for that purpose may use their powers of acquiring land by agreement or otherwise under this Act, and may enter upon the premises; and the local authority may recover in a summary manner from the owner the whole or a reasonable part of the expenses incurred by them under this section.”

This section was enacted to repeal section 125 of the Public Health (Scotland) Act, 1897, which did not refer to the introduction of water into a house, but merely authorised the Local Authority to demand a supply to be *at or reasonably near* a house.

The appellant's case was based mainly on the cost of the introduction of the supply, and consisted chiefly of the argument that the Sheriff must take this cost into consideration, although there was nothing about this in the section referred to, and that the words “ reasonably practicable ” referred to some extent to the expense involved.

The following was my precognition, which gives the full details except those of cost, which amounted to £250. The gross annual rental of the houses is £160.

“ I have been Medical Officer of Health for the Eastern District of the County of Dunbarton since April, 1912.

“ I am well acquainted with the circumstances regarding the sanitary conditions at Milton and Dumbuck, and have paid many visits to the properties there.

TABLE XXX.—EASTERN DISTRICT.—WATER ANALYSES (IN GRAINS PER GALLON), 1928.

Date of Report.	WHERE TAKEN.	Mineral Matter.	Organic Matter.	Total Solids.	Nitrates.	Free Ammonia.	Albuminoid Ammonia.	Total Ammonia.	Temporary Hardness.	Permanent Hardness.	Total Hardness.	Colour (Loch Katrine Water = 10).	* Degree of Sewage Contamination.
1928.													Weak Sewage.
Jan. 24	Grayhill Farm (Pump Well),	30.90	17.30	48.20	...	2.350	.254	2.604	12.50	3.72	16.22	...	...
Apr. 27	Laighpark Farm (Spring),	7.16	.24	7.40	trace	...	.004	.004	4.02	1.10	5.12	...	...
May 10	West Cochno Farm (Spring),	7.15	.30	7.45	.06	...	.004	.004	4.01	1.23	5.24	3	...
" 10	Whitehill Farm (Spring),	4.37	.20	4.57	.05	...	.003	.003	.42	1.89	2.31	...	...
" 11	Craigdow Farm (No. 1),	4.36	.70	5.06	trace	...	.008	.008	.98	1.52	2.50	15	...
June 25	Craigdow Farm (No. 2),	7.64	1.30	8.94	...	trace	.011	.011	3.15	1.88	5.03	26	...
Aug. 21	Glenhead Farm (Deep Well),	10.86	.50	11.36	...	.001	.006	.007	5.56	2.54	8.10	10	...
" 21	Lenziemill Farm (Deep Well),	10.42	.84	11.26	.51	.091	.012	.103	3.37	3.78	7.15	10	1—26
" 24	Netherwood Farm (Tank),	10.96	.30	11.26	...	.002	.005	.007	5.68	3.07	8.75	...	...
" 24	Westfield Farm (Shallow Well),	17.65	.48	18.13	.85	.003	.006	.009	1.10	10.92	12.02	...	...
Sept. 20	Hilton Park Golf Club,	2.93	2.25	5.18	...	.002	.012	.015	.91	.80	1.71	55	1—30
Oct. 4	Auchinleck Farm (Tank),	3.52	1.60	5.12	...	.001	.013	.013	1.46	.61	2.07	45	...
" 4	Faileys House (Burn),	3.65	1.24	4.89	...	.001	.010	.011	2.08	.43	2.51	28	...
Nov. 2	Little Balvic Farm,	6.85	.36	7.21	.48	.002	.007	.009	2.83	2.10	4.93	...	1—50
" 2	South Baljaffray Farm,	6.90	.52	7.42	...	.004	.010	.014	3.08	2.04	5.12	7	...
" 2	Duntiglennan Farm,	6.41	.30	6.71	.04	.001	.004	.005	4.17	1.12	5.29	...	...
" 5	Abrohill Farm,	6.27	.82	7.09	...	.001	.007	.008	1.08	2.62	3.70	18	...
" 30	Muirhead Farm (Spring),	5.13	.54	5.67	...	.002	.007	.009	.81	2.23	3.04	10	...

* NOTE.—Messrs. Tatlock & Thomson's regular method of stating their opinion of a water as to sewage contamination is as follows:—"It may be regarded as being equal to a mixture of one part of average sewage with parts of pure water which had been filtered through earth till clear." The figures in the column marked * give the result according to this method.

“ I have inquired especially into the conditions obtaining at the sixteen houses at Milton owned by the Trustees of the late Dr. William Allison M'Lachlan.

“ These houses are situated at right angles to the main road between Bowling and Dumbarton, and are distant about 60 feet from that road, measured to the nearest point of the houses, behind a property known as the Overtoun Coffee House.

“ The houses are within the Bowling Special Water District.

“ Prior to October, 1923, the Bowling Special Water District extended only to Littlemill, Bowling.

“ Owing to representations by the Education Authority of the County of Dunbarton and others, and the industrial growth of the District by the construction of works, it was considered desirable to extend the Special Water District westwards.

“ After an inquiry by Sheriff-Substitute A. J. P. Menzies, the District, was enlarged in October, 1923, to include Milton and Dumbuck.

“ Following on this extension a 5-inch pipe was laid from Littlemill to join a 3-inch pipe which at that time existed at Dumbuck. This 3-inch pipe was taken over by the Bowling Water Committee from the Dumbuck Trustees.

“ I was present at a meeting of the Eastern District Public Health Committee held on 2nd July, 1924, when it was reported that the Bowling Water Committee had agreed to give a connection between the main pipe and a Kennedy well to be situated behind the properties owned by the M'Lachlan Trustees.

“ It was explained that this connection was given without prejudice to the powers of the Local Authority under sections 40 and 41 of the Housing and Town Planning (Scotland) Act, 1919.

“ I was present at meetings of the Public Health Committee held on 13th January and 3rd February, 1926, when, following on a complaint regarding the supply of water, Mr. Dunbar (who was at that time Chief Sanitary Inspector) reported on the condition of the water supplies to Milton and Dumbuck. The Committee, after consideration, agreed that water should be introduced into each house.

“ Authorisation was given to serve notices under section 40 of the Housing and Town Planning (Scotland) Act, 1919, on the Trustees of the late Dr. William Allison M'Lachlan, calling on them to introduce water into the houses referred to.

“ I was present at a meeting of the Public Health Com-

mittee on 7th April, 1926, when it was intimated by the Clerk that he had served notices under section 40 of the Housing and Town Planning (Scotland) Act, 1919, on Messrs. Burgess & Buchanan, factors for the Trustees of the late Dr. William Allison M'Lachlan.

" I was present at a meeting of the Eastern District Public Health Committee held on 15th September, 1926, when it was intimated that the Trustees of the late Dr. William Allison M'Lachlan were prepared to give effect to the requirements of the Committee regarding the introduction of a water supply to the houses.

" At a meeting of the Eastern District Public Health Committee held on 3rd November, 1926, at which I was present, it was reported that the agents for the Trustees of the late Dr. William Allison M'Lachlan now offered to install a further Kennedy well in place of the installation of a supply in each house. The Public Health Committee adhered to their former decision.

" I was present at a meeting of the Eastern District Public Health Committee held on 5th January, 1927, when the Clerk read a letter from Messrs. M'Arthur, Brown & Robertson, agents for the Trustees of the late Dr. William Allison M'Lachlan, stating that their clients were now prepared to carry out the work in connection with the introduction of a water supply to the properties at Milton, and asking that they be furnished with a copy of the specifications which had been prepared by the officials. The meeting agreed that the specifications should be sent on the understanding that the work as contained in the specifications would be carried out without delay.

" At a meeting of the Public Health Committee held on 6th April, 1927, at which I was present, it was reported that plans and schedules for the introduction of a domestic water supply to each house had been prepared by the County Architect, and had been sent to the agents for the Trustees.

" At a meeting held on 1st June, 1927, and a subsequent meeting held on 6th July, 1927, at both of which I was present, the Public Health Committee authorised the Clerk to call on the Trustees to carry out the necessary works, failing which the Committee would exercise their statutory powers and carry out the work themselves.

" At the meeting of the same Committee held on 3rd August, 1927, at which I was present, the Clerk was instructed to ask for the return of the plans and schedules which had been supplied to the agents for the Trustees to enable the Medical Officer to arrange for the carrying out of the work on behalf of the Public Health Committee.

“ On 14th September, 1927, at 24 George Square, Glasgow, I met representatives of the M'Lachlan Trustees and others and discussed fully the introduction of water into the houses.

“ I was also present at the Eastern District Public Health Committee meeting on 5th October, 1927, when further communications from the agents for the M'Lachlan Trustees were discussed, and when the Committee again adhered to their previous decisions.

“ I was lastly at a meeting of the Public Health Committee on 2nd November, 1927, when it was intimated by the Clerk that the M'Lachlan Trustees were to make an appeal to the Sheriff against the order of the Committee.

“ The property referred to consists of two blocks, each containing eight houses of two apartments. I produce a photograph showing the front view of the property and the Kennedy well.

“ The blocks are structurally sound and in excellent condition. The tenants are of a superior class.

“ There are altogether 54 inhabitants, giving an average of 3·4 persons per house.

“ Prior to 1924 there was one stand-pipe situated between the houses and the Milton Burn, which runs in front of the houses about 80 feet distant.

“ The water in the stand-pipe was found to be of inferior quality and doubtful purity.

“ Since 1924 the houses have been supplied by a Kennedy well, situated at the back of the second block.

“ This Kennedy well is connected to the gravitation supply by a $\frac{3}{4}$ -inch pipe, and was introduced under the conditions previously referred to.

“ This well is the only supply of potable water available for the inhabitants.

“ Those persons in the houses further away have to carry the water a distance of 30 yards or so. The nearest house is about 10 yards away. The inhabitants of the houses on the upper storeys have to carry the water up a fairly steep outside stair in addition.

“ It is generally allowed by authorities on public health matters (Notter & Firth's 'Theory and Practice of Hygiene') that about 15 gallons of water are required per person per day, as under:—

“ Cooking, $\frac{3}{4}$ gallon; drinking, $\frac{1}{3}$ gallon; house washing, 3 gallons; share of laundry, 3 gallons; personal ablutions (including baths), 5 gallons; unavoidable waste, 2 gallons.

“ This means that, with an average of 3·4 persons per house, 51 gallons per day have to be carried in all weathers.

summer and winter. In the case of elderly persons this is an additional hardship. In the case of illness the want of a laid-on water supply is a calamity.

“The necessity for carrying this amount of water is apt to limit the use of water unless urgently required. Moreover, in severe weather Kennedy wells become frozen and have to be thawed each morning.

“The wash-houses are only such in name, because all water for the boilers or tubs has to be carried as I have described.

“The Kennedy well delivers 5 gallons of water in three minutes. Allowing 15 gallons for each person, the average consumpt for each house is 51 gallons. The total amount for the 16 houses is 816 gallons. At this rate of delivery it would take eight hours of continuous running to draw sufficient water for the tenants.

“Owing to the time occupied in drawing water, the persons occupying houses facing the burn are in the habit of drawing buckets of water from the burn. This burn is polluted higher up, and this polluted water is used for floor washing, &c. I have seen this done on several occasions.

“This cannot be defended, and is a menace to health which cannot be too strongly emphasised, and is due to the want of water in the houses.

“Similarly, owing to the want of adequate drainage and water to flush any drains existing, the inhabitants throw their liquid, semi-liquid, or solid refuse either on to a grid connected to a drain (there is a grid in front of each block), or, as is more common, the refuse—liquid or solid—is flung into the burn, the bed of which is in a filthy condition, or, sometimes, into the ashpits, which renders these very objectionable.

“The upstairs houses at the back have metal sinks on the outside landing into which waste material is emptied. As there is no water to flush these, they are apt to be very foul.

“Under all these circumstances I am of opinion that the water supply to these houses is defective in amount, due to the want of proper distribution, and that such want of water is liable to be a menace to health, and I am of opinion that a proper water supply should be introduced into each house for the use of the tenants occupying them.”

Before the Sheriff issued his interlocutor in the case, the appellants lodged a minute (referred to as minute No. 8), which was as follows:—

“ The appellants, without prejudice to their rights and under reservation of their pleas, hereby offer to provide—

- “ (1) A second three-quarter inch pipe from the main so as to double the total supply of water to the houses,
- “ (2) A supply of water to be taken to spigots or taps which will be provided for each of the four existing sinks on the stair landings, and
- “ (3) A supply of water also to be taken to two spigots or taps which will be provided at front of the houses.”

The respondents, after consideration, declined to accept this as a solution of the problem, as it did not constitute the introduction of a proper supply of wholesome water to each of the houses referred to.

Sheriff-Principal J. R. N. Macphail then issued the following interlocutor :—

“ DUMBARTON, 7th August, 1928.—The Sheriff, having inspected the houses to which this appeal relates, and considered the evidence led by the parties and also the minutes Nos. 8 and 9 of process, continues the cause for six weeks from this date to enable the appellants to carry out the work specified in their said minute No. 8 of process.

“ J. R. N. MACPHAIL.”

“ *Note.*—In company with the representatives of the parties, I have had the opportunity of inspecting the houses with which this appeal is concerned. They are not in a town, but in the country, and stand on the bank of a little burn. From the evidence it appears that until a few years ago their only water supply was obtained by a small pipe led from an upper part of this burn. There is no sewer in the neighbourhood, and the only drainage is into this burn. The houses are served by outside earth closets. The present water supply is taken from a public main, and its quality is unobjectionable.

“ At the date of the orders under appeal it was, however, and still is, unsatisfactory both in quantity and in the arrangements for its distribution.

“ It is plain that these objections can be removed by the work proposed by the appellants, and I am accordingly of opinion that in the whole circumstances it would not be reasonable to compel them at great expense to introduce water into the houses. I have, therefore, continued the case for

six weeks so as to give the appellants an opportunity of implementing the offer contained in their minute. In view of the correspondence, No. 3/1 of process, the appellants will be well advised to assume that an extension of this period will not be easily obtained. "J. R. N. M."

It will no doubt be easily recognised that this decision puts County Local Authorities in a somewhat anomalous position. A County Local Authority may under certain circumstances create a Special Water District, but, having done so, it would appear that they cannot go very much further, because they cannot compel the owners of property to do much more than provide a few inadequate standpipes at or near their premises. A burgh, on the other hand, has very full powers under section 246 of the Burgh Police (Scotland) Act, 1892.

In repealing section 125 of the Public Health (Scotland) Act, and substituting section 40 of the Housing and Town Planning Act of 1919, it was thought, apparently entirely wrongly, that County Authorities were getting an equivalent power to burghs.

As far as County Districts are concerned, outwith Special Water Districts, the difficulties of introducing a water supply which is not under adequate pressure into houses might be so great as not to be "reasonably practicable," but in Districts which, after due inquiry by a Sheriff, have been formed into a Special Water Supply area, where there is no difficulty as regards pressure, and where the main is laid at a reasonable distance from the houses, there should be complete power in the hands of the Local Authority to compel the introduction *into every house* of such an indispensable commodity as water.

HOUSING.

HOUSING (SCOTLAND) ACT, 1925.

During the year 115 representations were made to the Public Health Committee under section 6 of the Act. Of these, 19 referred to housing at Langmuir Rows, which is specially referred to below; 80 to houses in Duntocher, Hardgate, and Faifley; 31 to houses in Kilpatrick, 3 to houses in Cumbernauld; and 1 to a house in Condorrat.

The three houses in Walker's Land, Duntocher, referred to in last year's report, which were not fully dealt with owing to change of ownership, were closed, representations being submitted to the meeting in January, 1928. As these were included in the lists for 1927, they are not put into the totals for 1928.

In most instances the owners of properties referred to in the Closing Orders did not consider it desirable to put the houses into habitable condition.

Certain properties, however, which were detailed in last year's report, were to some extent reconstructed or repaired, and in addition to these considerable alterations were carried out at Horn's Land, Hardgate, which resulted in three houses being made suitable for occupation. In several instances permission was granted to owners to use the properties for purposes other than human habitation.

Situation of Properties.	No. of Houses.	Apartments.				
		1	2	3	4 or over.	
Horn's Land, Hardgate, - -	17	5	10	2	—	
61 William Street, Duntocher, -	4	2	2	—	—	
Hutton's Land, Hardgate, - -	2	—	1	1	—	
Duncan's Land, Duntocher, - -	17	9	7	1	—	
Gentle Row, Duntocher, - -	6	3	3	—	—	
Tar Land, Faifley, - - -	6	1	5	—	—	
Hall's Land, Faifley, - - -	3	—	1	—	2	
Lade House, Faifley, - - -	1	—	—	—	1	
Booth's Land, Duntocher, - -	5	3	2	—	—	
Duntocher Mill, Jennyhouse Brae, -	2	—	1	—	1	
Milton Douglas, Duntocher, - -	2	1	—	1	—	
Gilfillan's Land, Duntocher, - -	4	—	3	1	—	
Bremner's Land, Duntocher, - -	1	—	1	—	—	
Old Manse Place, Hardgate, - -	5	3	2	—	—	
The Craigs, Faifley, - - -	1	—	1	—	—	
Eton Place, Duntocher, - - -	2	—	2	—	—	
The Kennels, Cochno, - - -	1	—	—	1	—	
Milton Douglas Farm, Duntocher, -	1	—	—	1	—	
	80	27	41	8	4	
Kay's Land, Old Kilpatrick, - -	4	—	3	1	—	
Old Church Place, Old Kilpatrick, -	15	2	13	—	—	
Manse Gate, Old Kilpatrick, - -	1	1	—	—	—	
Kirkton Cottage, Old Kilpatrick, -	1	—	—	1	—	
M'Arthur's Land, Old Kilpatrick, -	9	3	4	1	1	
Stark's Land, Old Kilpatrick, - -	1	1	—	—	—	
	34	7	20	3	1	

Situation of Properties.	No. of Houses.	1	Apartments.		
			2	3	4 or over.
Crichton's Land, Wynd Cumber-					
nauld, - - - - -	2	—	2	—	—
Hamilton's Property, Cumbernauld,	1	—	1	—	—
	3	—	3	—	—
Young's Property, Main Street,					
Condorrat, - - - - -	1	1	—	—	—
Langmuir Rows, Kirkintilloch, -	19	—	18	—	1
Totals, - - - - -	134	35	82	11	6

The following details regarding the various Housing Schemes in the District have been furnished by the County Architect:—

OLD KILPATRICK.—The 48 houses in course of erection at Old Kilpatrick, referred to in last year's report as being built under the Slum Clearance Housing Scheme, were not quite completed at the end of the year, and the further 12 houses also referred to as being proposed to be built under the 1924 Act were commenced during 1928.

DUNTOCHER.—The balance of the 200 houses being erected at Auchentoshan under the Slum Clearance Scheme, viz., 52, were completed and occupied during the year. The further 62 houses referred to in last year's report, which were in course of construction under the 1924 Housing Act, were still uncompleted at the end of the year.

CUMBERNAULD.—The 24 additional houses to be built on a site adjacent to the existing Slum Clearance houses were not completed by the end of 1928.

As regards Waterside and Condorrat, no further housing in these areas is being considered in the meantime.

BEARSDEN.—The 50 houses which were in the course of erection under the 1924 Housing Act were completed and occupied during the year.

CROY.—The condition of the Smithstone and Croy Rows was further considered, and several schemes were put before the Committee. At the end of the year, however, no definite finding had been come to, and the Committee were still considering various proposals and sites.

MILTON.—It was decided in April that, in view of the condition of certain houses at Milton, 8 houses should be built, and it was remitted to the officials to put forward suitable sites, and negotiations regarding sites were still in progress at the end of the year.

SUBSIDISED HOUSES.—Sixteen houses on which £100 of subsidy per house was paid by the Local Authority under the 1923 Housing Act were completed during the year.

HOUSING OF RURAL WORKERS.—A scheme for rendering assistance under the Housing (Rural Workers) Act, 1926, was adopted by the District Committee during the year and approved by the Board of Health. Three applications were received in connection with this scheme during the year, but were not fully dealt with before the year closed.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1928.

The following is the statutory form submitted to the Scottish Board of Health for the year ended 31st December, 1928, on proceedings taken as regards the Inspection, Improvement, and Closure of Dwelling-houses, compiled from the registers kept by the District Sanitary Inspector:—

A. Housing—(Inspection of District) Regulations, 1928.

(1) Number of dwelling-houses inspected, - - -	1010
(2) Number of dwelling-houses which on inspections were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation, - - - - -	408
(3) Number of representations made to the Local Authority with a view to the making of Closing Orders, - - - - -	134
(4) Number of dwelling-houses in respect of which Closing Orders were made, - - - - -	134
(5) Number of dwelling-houses the defects in which were remedied without either the making of Closing Orders or the service of Notices under section 3 (1) of the Housing (Scotland) Act, 1925, - - - - -	50
(6) Number of dwelling-houses which after the making of Closing Orders were put into a fit state for human habitation, - - - - -	9

B. Housing (Scotland) Act, 1925.

(1) Number of dwelling-houses in respect of which notices were served under section 3 (1),	-	Nil.
(2) Number of dwelling-houses rendered fit for human habitation under section 3 (1),	- - -	Nil.
(3) Number of dwelling-houses in respect of which Closing Orders were deemed to have become operative under section 3 (1),	- - -	Nil.
(4) Number of dwelling houses rendered fit for human habitation by the Local Authority under section 3 (2),	- - - - -	Nil.
Number of cases where intimations were given under section 20 (1) as to insufficient water-closet accommodation,	- - - - -	11
(a) Cases where requirements complied with by owners,	- - - - -	16
(b) Cases where works carried out by Local Authority after failure of owners to do so,	- - - - -	Nil.
(c) Cases still pending,	- - - - -	Nil.

C. Housing Town Planning, &c. (Scotland), Act, 1919.

Number of cases where notices were served under section 40 (1) to provide dwelling-houses with water supply,	- - - - -	1
(a) Cases where requirements complied with by owners,	- - - - -	17
(b) Cases where works carried out by Local Authority after failure of owners to do so,	- - - - -	Nil.
(c) Cases still pending,	- - - - -	47

HOUSING REQUIREMENTS.

The following figures, which are, of course, for the most part estimates, are asked for by the Scottish Board of Health.

and show the probable number of houses required under the several headings:—

(1) To relieve overcrowding, - - - - -	87
(2) To replace houses at present occupied which should be closed and demolished, not including houses in (3), - - - - -	328
(3) To re-house persons who will be dispossessed by improvement and reconstruction schemes under Part II. of the Housing (Scotland) Act, 1925, - - - - -	Nil.
(4) To accommodate persons at present living in furnished apartments, - - - - -	17

MATERNITY SERVICE AND CHILD WELFARE.

The clinic, which had previously been held twice a week in the Duntocher West U.F. Church Hall, was moved to the new clinic premises in the Auchentoshan Housing Scheme in the month of November. The accommodation provided is on exactly the same lines as the Alexandria clinic, described on page 56.

As there is as yet no electric cable in the vicinity, it has been decided to leave the question of an ultra-violet ray clinic for the meantime.

The apartments over the clinic are being used as a nurse's house, which in many ways is a convenience.

A photograph of the clinic premises appears on the following page.

In addition to the usual routine work under the Midwives Act, it was considered necessary to report a certified midwife, Mrs. Janet Cunningham, No. 3572, of Waterside, Kirkintilloch, to the Central Midwives' Board for several breaches of the rules while attending two confinements. The charges referred to failure to call in a medical practitioner in an emergency as well as failure to send in certain forms in one case and failure to notify the supervising Local Authority that medical assistance had been called in in the second case.

The Board found the charges proved, and resolved "That Janet Cunningham, No. 3572, be warned and admonished to adhere strictly to the rules of the Board in future."

As regards the case of Rose Ann Gallacher, No. 194, Duntocher, I reported to the Central Midwives' Board in February, 1928, that I had had no further cause for complaint, and that she had carried out her work in a satisfactory manner.

STATISTICS REQUIRED BY APPENDIX TO BOARD OF HEALTH'S
CIRCULAR DATED 20TH DECEMBER, 1927.

1. *Infantile Mortality*.—(a) Number of deaths, 37. (b) Rate per 1000 births, 78. (c) Numbers of deaths and rates per 1000 births classified according to age groups and causes of death (see Table XXXIII.).

2. *Births*.—(a) Number registered—(i) legitimate, 222; (ii) illegitimate, 25. (b) Number notified, 457. (This figure includes 16 births which occurred in institutions out-with the area.) (c) Number classified according to nature of attendance—doctor only, 211; midwife only, 176; both doctor and midwife, 52; not attended by either doctor or midwife, 2. (d) Number of still-births (births of dead children), 10.

3. *Maternal Mortality*.—(a) Number of deaths resulting from miscarriage or child-birth, 4. (b) Number of deaths resulting from puerperal sepsis, 2.

4. *Report under Midwives (Scotland) Act, 1915*.—There are 13 midwives practising in the District; only 2 of these are qualified by examination. The others were in practice when the Midwives (Scotland) Act passed, and thus were automatically added to the Midwives' Roll. The following gives the details of the Annual Report on the working of the Act during 1928, as required by the Central Midwives' Board:—

REPORT.

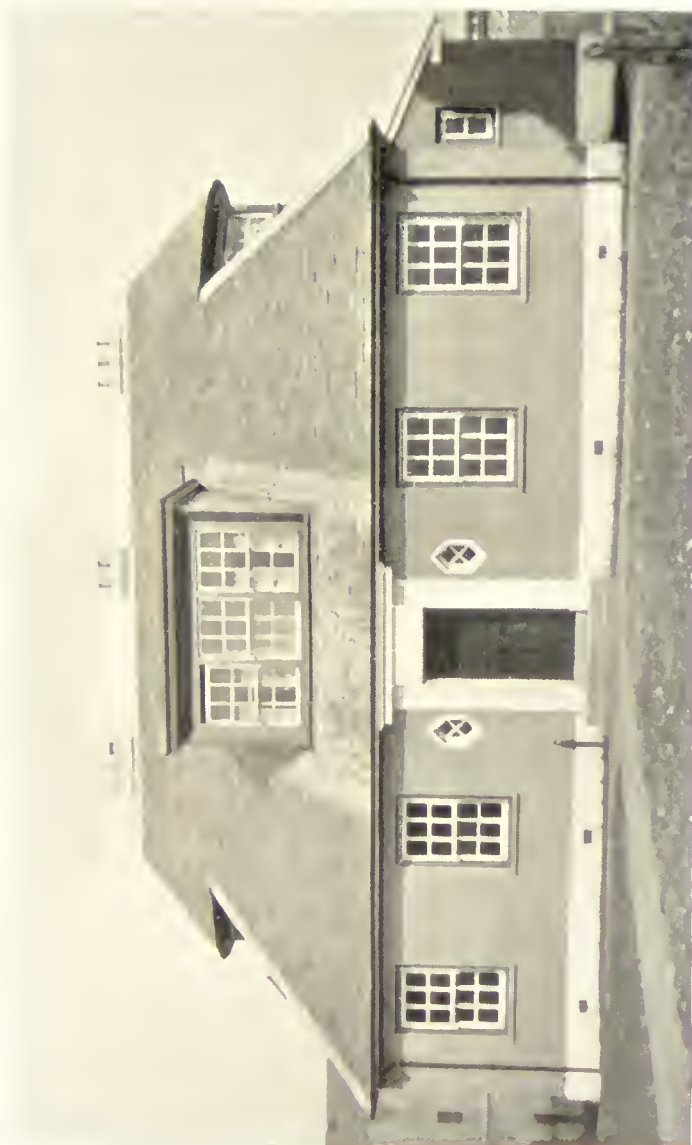
BIRTHS IN DISTRICT:—

Total number of births registered in 1928,	-	-	-	447
Actual number of births attended by midwives during 1928,	-	-	-	176
Total number of deaths of new-born children (within ten days) during 1928,	-	-	-	7
Actual number of deaths of new-born children (within ten days) occurring in the practice of midwives during 1928,	-	-	-	Nil.
Actual number of cases not attended by a doctor or midwife during 1928,	-	-	-	Births, 2 Deaths, Nil.

In addition to the above, 16 notifications were received of births in institutions outside the area. Five of these were still-born.

CASES OF OPHTHALMIA NEONATORUM:—

Total number of cases during 1928,	-	-	-	5
Actual number of cases occurring in the practice of midwives during 1928,	-	-	-	2
Actual number of cases occurring where confinement not attended by a doctor or midwife during 1928,	-	-	-	Nil.



DUNTOCHER CHILD WELFARE CLINIC AND NURSE'S HOUSE.

CASES OF PUERPERAL SEPSIS :—

Total number of cases during 1928, -	6
Total number of deaths during 1928, -	2
Actual number of cases occurring in the practice of midwives during 1928, - - - - -	2
Actual number of deaths occurring in the practice of midwives during 1928, - - - - -	Nil.
Actual number of cases occurring where confinement not attended by a doctor or midwife in 1928, - - - - -	Cases, Nil. Deaths, Nil.

CASES OF STILL-BIRTH (DEAD-BORN) :—

Total number of cases during 1928, - - - - -	10
Actual number of cases occurring in the practice of midwives during 1928, - - - - -	2

CASES OF EMERGENCY :—

In 30 instances midwives requiring the assistance of a medical practitioner sent in the statutory forms.

The emergencies were as follows :—

Hydramnios, - - - - -	1
Foot presentation, - - - - -	1
Face presentation, - - - - -	1
Occipito posterior, - - - - -	1
Delay in labour, - - - - -	13
Undue interval between birth of twins, - - - - -	1
Adherent placenta, - - - - -	2
Rupture of perineum, - - - - -	3
Rise of temperature, - - - - -	2
Still-birth, - - - - -	1
Spina bifida, - - - - -	1
Discharge from baby's eyes, - - - - -	2
Abscesses on baby, - - - - -	1
	<hr/> 30 <hr/>

NOTIFICATIONS :—

Statutory forms of Notifications were received during the year, as under :—

Notification of still-birth, - - - - -	2
Notification of liability to be a source of infection, - - - - -	2

ADMINISTRATION :—

There has been no change in the administration of the Act since the last report.

The following supplementary figures are of interest:—

The number of births notified in the District was 457,* and, consequently, the percentage of registered births notified was 98·7.

The percentage of total births attended by midwives only was 39·4.

The percentage of total births attended by doctors only was 47·2.

The percentage of total births attended by both was 13·4.

The percentage of still-births was 2·2.

5. <i>Home Visitation.</i> —	Number Visited.	Total Visits.
Infants, - - - -	479	3482
Children (1-5 years), - -	1509	3037
Expectant mothers, - -	30	330
Total, - - - -	2018	6849

6. *Voluntary Health Visitors' Report.*—There are no Voluntary Health Visitors connected with the Scheme in the District.

7, 8, and 9. *Ante-natal, Post-natal, and Child Welfare Consultations.*—The information requested under these three headings will be found in Table No. XXXII.

10. *Special Treatment Centres.*—The Local Authority owns no Special Treatment Centres, but during the year, by arrangement with the Education Authority, there were treated at the Authority's Clinics 7 children under five years of age; of these, 6 cases were dealt with for conditions of the ear, nose, or throat, while one child was sent to the Dentist for treatment.

11. *Day Nurseries, Kindergartens, and Play-centres.*—No provision has been made for these in the Scheme for the District.

12. *Food and Milk.*—(a) Number of persons in respect of whom applications were made for food and milk—(i) mothers, 48; (ii) children, 63. (b) Number of cases certified on medical grounds as requiring food or milk—(i) mothers, 40; (ii) children, 56. (c) Number of cases under (b) certified as necessitous—(i) mothers, 40; (ii) children, 56.

13. *Measles.*—(a) Number of cases notified; notification is not in force. (b) Number of deaths (i) from measles, 1; (ii) from sequelæ, pneumonia, 5; bronchitis, 1. (c) Number of cases removed to hospital, 2. (d) and (e) Number of

* This figure includes 16 births which occurred in institutions outside the District.

special domiciliary visits and details of special staff engaged for epidemics; no arrangements of this kind were made.

14. *Whooping-cough*.—The remarks applicable to Measles also apply to this disease, except that 6 cases were removed to hospital. There was one death from Whooping-cough, without complication; in 3 cases Pneumonia complicated the issue, while the fatal complications in other instances were, Pneumonia and Convulsions, 1; Convulsions, 1; and Bronchitis, 2.

15. *Ophthalmia Neonatorum*.—(a) Number of cases notified—(i) by doctor, 3; (ii) by midwife, 2; (iii) by institution, none. (b) Number of cases in which infection was gonococcal, not known. (c) Number treated in residential institutions, none. (d) Number of cases in which there was appreciable loss of vision, none.

16. *Maternity Hospitals or Homes*.—There are no institutions of this nature connected with the Scheme, but by arrangement during the year 8 women from the Eastern District of the County were treated in the Ante-natal Wards of the Royal Maternity Hospital, Glasgow, while the total number of notifications of birth received from that institution was 16. The conditions found in the ante-natal cases were Albuminuria, 3; Hæmorrhage, 1; Pyelitis, 1; Contracted Pelvis, 1; Ante-partum Hæmorrhage, 2.

17. *Homes for Unmarried Mothers Before and After Confinement*.—No provision is made for these under the scheme for the District.

18 and 19. *Hospitals for Sick Children and Convalescent Homes*.—By arrangement with the Glasgow Poor Children's Fresh-Air Fortnight and Cripple Children's League, one child was sent to the Biggart Memorial Home, Prestwick, during the year.

20 and 21. *Boarding Out and Home Helps*.—Nothing of this nature was done during the year.

22. *Educational*.—No special classes, lectures, or demonstrations were held in the District during the year.

23. *Agencies*.—There are no other agencies associated with the scheme.

24. *Other provisions*.—Arrangements have been made under the scheme for the provision of skilled assistance at the confinement of women in necessitous circumstances, and during the year 6 applications for such assistance were received. Of these applicants, however, 2 were in receipt of Maternity Benefit under the National Health Insurance, and were consequently refused the assistance sought, while 4 applications were granted.

TABLE XXXI.—EASTERN DISTRICT.
MATERNITY SERVICE AND CHILD WELFARE SCHEME.
HOME VISITATION.

PARTICULARS.	EAST AND WEST KILPATRICK PARISHES	CUMBERNAULD AND KIRKIN- TILLOCH PARISHES.
Number of Births intimated to the Health Visitor during year, - - - - -	227	228
Number of First Visits— - - - -	251	284
To Children under 1 year, -	236	243
To Children from 1 to 5 years,	9	17
To Expectant Mothers, - -	6	24
Number of Re-visits— - - - -	2631	3683
To Children under 1 year, -	979	2024
To Children from 1 to 5 years,	1405	1606
To Expectant Mothers, - -	247	53
Number of Visits to Midwives, - - - -	27	80
Number of Visits of Special Inquiry, - -	12	22
Number of Visits to Tuberculous Cases, - -	104	305
TOTAL VISITS, - - - - -	3025	4374
Number of Infants born prematurely, - -	6	14
Number of Infants born at full time, - - -	201	214
Expectant Mothers who consulted doctors or ante-natal clinics, - - - - -	10	3

MATERNITY SERVICE AND CHILD WELFARE SCHEME.
CLINICS.

PARTICULARS.	DUNTOCHER.	KILPATRICK.	TWECHAR.
Number of Clinics held—			
With Health Visitor only in attendance, -	50	27	—
With Doctor and Health Visitor in attendance,	51	52	52
Ante-natal Consultations—Total attendances, -	45	11	4
First attendances, -	7	3	3
Referred to Ante-natal Ward, Maternity Hospital,	1	1	—
Referred to family doctor, - - - - -	1	1	—
Treated at Clinic, - - - - -	5	1	—
Post-natal or other Consultations, - - - -	142	34	7
Child Welfare Consultations—			
Total attendances—Under 1 year, - - -	333	144	529
Over 1 year, - - - -	259	102	189
First attendances—Under 1 year, - - -	66	23	70
Over 1 year, - - - -	20	7	7
Attendances in connection with Milk Applications,	70	9	23

DISEASES RECORDED ON CHILD WELFARE CLINIC CARDS—

DUNTOCHER CLINIC.

General Conditions—

Rickets, -	-	-	-	2
Marasmus, -	-	-	-	3

<i>Eye Conditions</i> —			
Conjunctivitis,	-	-	1
Blepharitis,	-	-	1

<i>Throat, Nose, and Ear Con-</i>			
<i>ditions—</i>			
Adenoids,	.	.	2
Otorrhoea,	.	.	2
Tonsilitis,	.	.	1
Respiratory Diseases,			25

<i>Alimentary Diseases—</i>				
Diarrhœa,	-	-	-	3
Enteritis,	-	-	-	5
Stomatitis,	-	-	-	1
Hernia,	-	-	-	2
Improper Feeding,				10
Constipation,	-	-	-	2

<i>Skin Diseases</i> —				
Impetigo,	-	-	-	3
Eczema,	-	-	-	3

DUNTOCHER CLINIC—contd.

Tuberculous Conditions,	2
Measles, - - - -	1
Phthisis, - - - -	1
Whooping Cough, - -	3
No disease specified.	13

OLD KILPATRICK CLINIC.

General Conditions—

Rickets,	-	-	-	1
Marasmus,	-	-	-	3

Eye Conditions—
Conjunctivitis, . . . 1

<i>Throat, Nose, and Ear Con-</i>			
<i>ditions—</i>			
Adenoids,	.	.	3
Tonsilitis,	.	.	1
Tongue Tie,	.	.	1
Respiratory Diseases,	.	.	8

<i>Skin Diseases—</i>				
Eczema,	-	-	-	1
Impetigo,	-	-	-	3

OLD KILPATRICK—contd.

Tuberculous Conditions,	1
No disease specified,	- 7

TWECHAR CLINIC.

Malnutrition, -	-	-	8
Eczema, -	-	-	1
Bronchitis, -	-	-	10
Hernia, -	-	-	1
Rickets, -	-	-	2
Gastritis, -	-	-	1
Diarrhoea, -	-	-	3
Anal Polypus, -	-	-	1
Discharging Ears, -	-	-	2
Cardiac Disease, -	-	-	1
Chickenpox, -	-	-	1
Impetigo, -	-	-	2
Conjunctivitis, -	-	-	1
Hydrocele, -	-	-	1
Talipes, -	-	-	1
Tonsils and Adenoids, -	-	-	1
Tongue Tie, -	-	-	5
Ulcerated Mouth, -	-	-	1
Whooping Cough, -	-	-	3
Kidney Disease, -	-	-	1
No disease specified, -	-	-	30

The above are the diseases, &c., noted at first attendances, and the totals agree with the figures shown in the table above.

TABLE XXXIII.—EASTERN DISTRICT.
MATERNITY SERVICE AND CHILD WELFARE.
CAUSES OF DEATH—CHILDREN UNDER ONE YEAR.
YEAR 1928.

CAUSE OF DEATH.	Under 1 Week.	1, and under 2 Weeks.	2, and under 3 Weeks.	3, and under 4 Weeks.	Total under 4 Weeks.	4 Weeks, and under 3 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total Deaths under 1 Year.
Smallpox, - - -	...	...	...	...	...	...	...	...	...	...
Chickenpox, - - -	...	...	...	...	...	...	...	...	...	...
Measles, - - -	...	...	...	...	...	...	1	...	...	1
Scarlet Fever, - - -	...	...	...	...	...	...	...	...	...	...
Whooping Cough, -	...	...	...	...	...	...	2	1	1	4
Diphtheria and Croup, -	...	...	...	...	...	...	...	...	...	...
Erysipelas, - - -	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis,	...	...	...	...	...	...	1	...	...	1
Abdominal Tuberculosis,	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Dis- eases, - - -	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuber- culous), - - -	...	...	...	...	...	...	...	...	...	...
Hydrocephalus, - - -	...	...	...	...	...	...	...	...	...	...
Convulsions, - - -	...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms), -	1	1	...	...	2	2	2	...	2	8
Bronchitis, - - -	...	...	...	...	...	2	1	...	2	5
Diarrhœa and Enteritis,	...	...	...	...	...	...	...	1	1	2
Other Digestive Diseases,	...	...	...	...	...	...	...	...	...	...
Congenital Malforma- tions, - - -	...	...	...	1	1	2	...	...	...	3
Congenital Heart, -	...	...	...	...	...	...	...	...	...	...
Premature Birth, -	5	...	...	...	5	...	...	...	...	5
Atrophy, Debility, and Marasmus, - - -	1	...	...	...	1	...	1	...	...	2
Atelctasis, - - -	1	...	...	...	1	...	...	...	...	1
Injury at Birth, - -	...	...	...	...	...	...	...	...	...	...
Suffocation, overlaying,	...	1	...	...	1	...	...	...	...	1
Syphilis, - - -	...	...	...	...	...	...	...	...	...	...
Rickets, - - -	...	...	...	...	...	...	...	...	...	...
All other causes, - -	1	...	1	...	2	...	1	...	1	4
Total, - - -	9	2	1	1	13	6	9	2	7	37

GENERAL SANITATION.

BEARSDEN SEWAGE.—In connection with the laying of the new outfall sewer to the Clyde at Yoker an inquiry was held on 8th August in Glasgow by the Board of Health, and evidence was put before them regarding the nature of the sewage dealt with.

This inquiry arose through the objections lodged by the Corporation of Glasgow to the nature of the effluent, which is crude sewage.

The following is an excerpt from my precognition:—

“ The District was formed into a Drainage District under the Public Health (Scotland) Act of 1867. The areas of this District have been extended from time to time as necessity arose. The last extension of the District was in 1924.

“ The population in the Bearsden Special Drainage District amounts to 5000. This includes the populations in Bearsden, Westerton, and Drumchapel.

“ The valuation of this area is £142,020. The rate levied upon occupiers is 3d. per £ and on owners 3d.

“ The sewage from this District has since the beginning been taken by a sewer to the River Clyde.

“ The amount of sewage from the District, taking the water supply to the inhabitants at 40 gallons per head per day, would be 200,000 gallons, but in addition to this a large amount of surface water is carried by the sewers, which dilutes the sewage to a considerable extent.

“ Owing to the natural increase of population in the District and the needs of Westerton and the area known as Knightswood, a comprehensive scheme of drainage was considered during 1924.

“ In 1925, as a result of the City of Glasgow Boundaries Act, the area of Knightswood was taken into the City of Glasgow. In spite of this it was considered desirable to go on with a scheme for the improvement of the drainage of the Bearsden and Westerton areas, and it was agreed to lay a new system of sewers from Bearsden down to the Clyde.

“ There were several reasons for this—

“ (1) Because the existing sewer was to some extent defective.

“ (2) Because this sewer was overtaxed, and, as the population of the area was increasing, a much larger sewer would be required in the future.

“ (3) Owing to the great amount of unemployment in the locality it was thought that this might be a work which would help the situation.

" I have from time to time seen the existing outlet and have watched the sewage discharging into the Clyde. I cannot conceive how there can be any objection to this sewage going into the river at this point.

" I have always been astonished at the extraordinarily pure appearance of the effluent as discharged. I account for its condition by the distance the sewage has to travel from Bearsden to the river and the length of time it is in the sewers.

" From the populous part of Bearsden to the river is a distance of nearly three miles.

" For my information as to the amount of solid material in the effluent, I had samples taken on the 20th July. The first sample, taken at 12 noon, showed that the total suspended matter present was 2.9 parts per 100,000, while the oxygen dissolved in five days was 1.257 parts per 100,000. In the final Report on the Treatment and Disposal of Sewage it is suggested that the standards for an effluent discharging into a river should be taken as 3 parts of suspended matter per 100,000 and 2 parts of dissolved oxygen per 100,000 in five days.

" It will be seen that in both instances the effluent from Bearsden is better than the standard suggested in the report by the Commissioners appointed.

" The second sample, taken at 1.5 p.m. on the same day, gave figures which, although not so good, still indicated that the sewage from the District was extremely weak, the oxygen dissolved in five days being 1.57, which is within the standard referred to above.

" It will be noted that the Commissioners in their final report lay great stress upon the amount of oxygen dissolved by the effluent in five days.

" I have seen many effluents from sewage works, and I am satisfied that the discharge at the Bearsden sewer outfall is better than many of them.

" The reason for this satisfactory condition of the effluent is that the area drained comprises only residential properties, there being no factory or industrial effluents in the District which are taken into the sewers, combined with the point previously mentioned regarding the length of the sewer from Bearsden to the Clyde.

" The Clyde at the point of discharge of the Bearsden outfall sewer is tidal water.

" There are quite a number of effluents containing crude sewage discharged into either the Clyde itself or tributaries of the Clyde both above and below the Bearsden effluent. The outstanding cases are places such as Motherwell and

Wishaw and Coatbridge above and Paisley and Renfrew below.

“ Taking the population of the Bearsden Drainage District as 5000, it will at once be seen that the pollution from that District is almost negligible when compared with the populations of the places mentioned, which are: Paisley, 87,900; Motherwell and Wishaw, 70,100; Coatbridge, 44,300; and Renfrew, 14,700; and under these circumstances I have no hesitation in saying that there will be no injury to the health of the inhabitants of the District by its continuance.”

The finding of the Board of Health indicated that, although it might be advantageous if the Eastern District Committee and the Corporation of Glasgow came to terms for the treatment of the sewage from Bearsden at Dalmuir, the nature of the sewage was such that the pollution caused to the River Clyde at Yoker would be slight. The Board of Health also referred to the existing rights of the Eastern District Committee.

PRIVATE SLAUGHTER-HOUSES.

In view of the coming into force of the Slaughter of Animals (Scotland) Act, 1928, an inspection was made of the only two public slaughter-houses in the Eastern District, both situated in Cumbernauld. These premises, although somewhat inconveniently situated, are kept in satisfactory condition.

It was recommended that slaughterers should use one of the captive bolt appliances, of which there are several varieties.

FACTORIES AND WORKSHOPS.

The tables relating to factories and workshops will be found on page 150 of the District Sanitary Inspector's Report.

Apart from purely routine work, very little falls to be reported here. In March, however, my attention was directed to a case where the tenant of a tenement house had converted his kitchen into a workshop bakehouse by the introduction of hotplates and ovens, the produce being retailed locally.

A visit of inspection showed that these hotplates, &c., were actually alongside the kitchen bed, and that the baking of scones and teacakes for retail was in progress.

The house being one of only three apartments, occupied by a man and his wife (an invalid), two grown-up sons, and an adult male lodger, it was apparent that the conditions were very far from satisfactory, especially as the kitchen was also being used as a sleeping apartment.

On it being pointed out that the existing conditions constituted an infringement of section 100 of the Factory and Workshop Act, 1901, the occupier at once intimated his intention of giving up the business. No further action required to be taken.

In August notice of the occupation of premises as a home bakery was received relating to premises in the Cumberland Parish. A visit of inspection revealed the fact that no exception could be taken to the use of the premises as such, but suggestions were made for the improvement of the existing arrangements.

Later in the year two notices were received from H.M. Inspector of Factories relating to the condition of certain bakehouses. The matter was at once taken up and the defects remedied.

REPORT BY COUNTY AND DISTRICT SANITARY INSPECTOR.

24 GEORGE SQUARE,
GLASGOW.

GENTLEMEN,

In accordance with the requirements of the Scottish Board of Health, I submit for your consideration Annual Report for year ending 31st December, 1928, containing a record of the work executed by my Department.

BUILDING BYE-LAWS.

In comparison with year ending 31st December, 1927, a slight decline is to be noted in the building operations within the District for the current year. During the year the number of plans approved totalled 139, compared with 152 the previous year. The nature of the buildings constructed or under construction were on a larger scale than previously, and included a biscuit factory at Drumry, near Drumchapel. Due to a contravention of the Bye-laws a proprietor, who neglected to submit plans of a brick building, was requested to have the building removed, which was done without further action being necessary. The new houses built and completed without State assistance totalled 15, compared with 21 for the previous year. Under the Housing, &c., Act, 1923, approval was obtained by private builders for the construction of 49 subsidised houses.

Sewer Extensions.—To meet the requirements of additional buildings for which plans were submitted and approved, drainage facilities were provided or sewers extended at the undernoted areas, either directly by the District Committee or after arrangement with the proprietors of the proposed buildings:—

1. Thorn Road.
2. Drumry.
3. Canniesburn.
4. Bearsden Housing Scheme.
5. Hillfoot.
6. Old Kilpatrick Housing Scheme.

TABLE XXXIV.—PLANS OF BUILDINGS—EASTERN DISTRICT.

PARISHES.	PLANS.						No. of Buildings.			No. of Houses.					Total.
	New Buildings.			Alterations.											
	Bungalows.	Cottages.	Plats and Terrace Houses.	Bungalows, &c.	Plats and Terrace Houses.	Amended.	Total.	Bungalows.	Cottages.	Plats and Terrace Houses.	2 Apartment.	3 Apartment.	4 Apartment.	5 Apartment and over.	
Cumbernauld, -	...	1	3	1	1	...	6	...	2	9	12	22	1	..	35
Kirkintilloch, -	2	...	...	1	...	...	3	3	...	...	...	...	2	1	3
East Kilpatrick, -	30	1	1	5	1	...	38	72	7	...	...	..	63	47	110
West Kilpatrick, -	4	2	1	5	...	...	12	19	5	15	80	46	5	1	132
Total, -	36	4	5	12	2	...	59	94	14	24	92	68	71	49	280

Plans were also passed for 34 Carages, 7 Petrol Pumps, 1 Factory, 3 Halls, and 35 other buildings.

A record of the plans passed, number and nature of buildings, and number of apartments is contained in Table XXXIV.

DANGEROUS BUILDINGS.

In one instance throughout the year it was found necessary to serve a notice under the Burgh Police (Scotland) Act, 1892, on the proprietors of a property at Dumbuck requesting that the building be taken down, made secure or repaired, with the result that the property was repaired to my satisfaction.

DRAINAGE.

BEARSDEN SPECIAL DRAINAGE DISTRICT.—With the completion of the pumping station, and the sewers in the Hillfoot area, which was included in the last extension of the District, the drains which previously discharged into the Manse Burn have all been connected to the sewer. The subject of the Board of Health inquiry into the treatment of the Bearsden sewage appears in another part of the joint report.

Station Road.—On account of the heavy rainfall experienced in the spring of the year, flooding occurred at Station Road, where the sewer was unable to cope with the volume of water. With the new outfall sewer in operation, it is hoped that this recurring complaint will be overcome.

St. Germain's Loch (Overflow).—In conjunction with the estate proprietor the Bearsden Drainage District Committee paid part cost of the cleaning operations required to be undertaken at the mouth of the overflow from St. Germain's Loch, and also in the bed of the stream for a distance of approximately 130 yards.

CUMBERNAULD SPECIAL DRAINAGE DISTRICT.—Referring to the report for 1927, it was shown that four properties were still to be connected to the new sewage system. Two of these have been connected, while of the two remaining, one, I am sure, will involve a prosecution, while the other is for a very old property which I am afraid will come under the Insanitary Areas Clearance Scheme; therefore, I am not pressing for it to be made.

In addition to the drainage systems for new buildings referred to under "Buildings," the renewal of several old drainage systems was approved and supervised during alterations.

There is nothing special to report in connection with the other drainage districts in so far as this Department is concerned.

DISPOSAL OF REFUSE.

The work in connection with the scavenging of Special Districts shows a decided increase in each District compared with the previous year, which can be traced to the additional houses, and also in the case of the Bearsden Special Scavenging District to the increase in the numbers taking advantage of the scheme for the removal of garden refuse.

In addition to the private streets and footways within the Special Scavenging Districts, the roads formed in Housing Schemes have to be swept and gullies cleaned, thus adding to the work. To cope with the increase it was found necessary to engage temporary workers at different periods throughout the year, but this does not overcome the difficulty. Three motor wagons have to undertake the work, and are allotted and staffed as recorded against each Special District. The arrangement at present I consider quite inadequate, as the work now executed within the Bearsden Special Scavenging District can keep two wagons fully in commission.

This matter is presently being considered by the Bearsden Special Scavenging District Committee.

A record of the work done and service within each District is as follows:—

BEARSDEN SPECIAL SCAVENGING DISTRICT.

Loads Removed.	No. of Bins and Pits Emptied.	Weight of Refuse. Tons. Cwts.		Miles Travelled.	Petrol Consumpt. Gallons.
1877	107,246	2999	—	15,406	2161

The average weight of each load removed was 31·955 cwts., and the average number of miles travelled per gallon of petrol 7·129.

Under the scheme for removal of garden refuse the total number of ratepayers receiving this service was 192, compared with 165 for year 1927. When the scheme was introduced in the year 1921, twenty-six residents were on the register, and a steady increase has been maintained since.

Service—1 wagon and staff in full commission.

Staff—1 motor driver, 3 scavengers, and 1 roadman.

The wagon and staff shown against Duntocher Special Scavenging District also serve half-time in Bearsden Special Scavenging District.

KILPATRICK AND BOWLING SPECIAL SCAVENGING DISTRICT.

Loads Removed.	No. of Bins and Pits Emptied.	Weight of Refuse. Tons. Cwts.		Miles Travelled.	Petrol Consumpt. Gallons.
955	47,745	1420	—	7136	1224

The average weight of each load removed was 29·738 cwts., and the average number of miles travelled per gallon of petrol 5·830.

Service—1 wagon and staff in full commission.

Staff—1 motor driver, 2 scavengers, and 1 coup attendant.

DUNTOCHER SPECIAL SCAVENGING DISTRICT.

Loads Removed.	No. of Bins and Pits Emptied.	Weight of Refuse. Tons. Cwts.		Miles Travelled.	Petrol Consumpt. Gallons.
674	44,544	1008	10	4725	717

The average weight of each load removed was 29·925 cwts., and the average number of miles travelled per gallon of petrol 6·589.

Service—1 wagon and staff in half commission.

Staff—1 motor driver, 2 scavengers, and 1 coup attendant.

LAWMUR COUP.—The let was again renewed for a period of twelve months, and, considering the fact that tipping operations were restricted to the quarry hole next the highway, we have been comparatively free of complaints.

DUMBUCK COUP.—This coup, owing to its ideal situation for refuse tipping purposes continues to give complete satisfaction. The war on the rats is carried on here from one year's end to the other, otherwise it would soon be overrun consequent on the proximity to the River Clyde.

CUMBERNAULD.—The scavenging within Cumbernauld Special Scavenging District, where the work is carried out by private contract, is giving general satisfaction. The District Committee and the contractor, Mr. John McNeill, Roadside, Cumbernauld, entered into a new agreement for the current year, when it was agreed that the contract price will be £105 per annum. Permission has been given to deposit all refuse not fit for agricultural purposes in a quarry hole on Carrickstone Farm, which removes a long-standing grievance by the contractor.

CONDORRAT.—A new agreement was also arrived at between the District Committee and the Contractors for Condorrat Special Scavenging District, Mr. John Main, Condorrat Farm, Condorrat. Terms of contract, £80 per annum. The work in this District is also meeting with general approval.

WATERSIDE.—There is no change to report in Waterside Special Scavenging District, where the work is undertaken by Mr. James Duncan, 120 Shakespeare Street, Maryhill. Glasgow, on similar terms for year 1927, viz., £100 per annum.

WATER-CLOSETS, PRIVIES, &c., AND HOUSES WITHOUT WATER SUPPLY, &c.

The following particulars and Table No. XXXV. records the information required under the Public Health Circular No. IX., 1925, for year ending 31st December, 1928 :—

	Privies, &c., converted to W.C.s.	Remaining at end of year.		
		Privies.	Earth- Closets.	Privy Middens.
Bearsden, - - - -	—	11	—	2
Drumchapel, - - - -	—	6	—	—
Westerton, - - - -	—	2	—	—
Cumbernauld, - - - -	10	2	—	59
Condorrat, - - - -	9	2	—	24
Duntocher, Hardgate, and Faifley, - - - -	1	12	—	3
Kilpatrick and Bowling, - -	1	32	—	1
Milton and Dumbuck, - -	—	25	—	8
Waterside, - - - -	—	3	—	49
Totals, - - - -	21	95	—	146

LIGHTING.

Further improvements continue to be made in the three Special Lighting Districts by the erection of additional lamps in developed areas, and at points where the lighting was not giving the required satisfactoin. Consideration was also given to the prolongation of the lighting season, with the result that in Bearsden Special Lighting District the season commenced on 15th August, and terminated on 15th May, completing a period of 39 weeks, compared with 35 weeks for the previous year.

TABLE XXXV.—DETAILS OF SANITARY CONDITIONS.

	No. of Houses with out water supply and sink inside the House.	No. of W.C.s serving Tenants.				No. of Dry Closets serving Tenants.				No. of Privy Middens serving Tenants.				No. of Ashpits serving Tenants.			
		2	3	4	5	2	3	4	5	2	3	4	5	2	3	4	5
Bearsden, - - -	4	6	1	1	...	...	...	...	...	...	...	...	...	1	...	3	6
Drumchapel, - -	31	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Condorrat, - - -	124	24	14	1	1	...	...	...	...	5	1	5	3	15	5	4	10
Cumbernauld, - -	173	30	17	2	4	...	...	...	...	20	10	5	7	20	7	12	26
Duntocher, Hurdgate, and Failev, - - -	28	35	45	48	8	3	2	4	...	...	1	...	...	...	...	...	...
Kilpatrick and Bowling.	29	36	30	19	1	10	3	1	5	...	...	...	...	2	...	2	2
Milton and Dumbuck,	82	1	...	...	...	5	5	3	7	1	1	...	4	1	...	...	2
Twechar, - - -	..	43	36	...	...	...	...	...	...	...	...	...	...	...	...	...	23
Waterside, - - -	94	...	...	...	...	...	...	...	...	16	7	13	5	15	6	9	7
TOTAL, - - -	565	190	143	71	14	18	10	8	12	42	20	23	19	54	18	30	76

The lighting season in Duntocher and in Kilpatrick and Bowling Special Lighting Districts extends from 1st September to 30th April, covering 34 weeks and 3 days, against 33 weeks for last year.

The number of lamplighters engaged and lamps lit within the Special Districts are as follows:—

District.	Lamplighters.	No. of Lamps.
Bearsden, - - -	5	505
Duntocher, - - -	1	115
Kilpatrick and Bowling, -	1	153

Included in the above figures are 5 private lamps, situated at Bearsden (1), Westerton (2), Drumchapel (1), and Hardgate (1). In addition there are 8 signal lamps on the Boulevard from Duntocher to Bowling, also 3 at Courthill. Drymen Road, Bearsden, which are under the supervision of my Department by arrangement with the County Road Board.

The cost of gas supply is receiving consideration at the present time, and negotiations with regard to adjustment of price and supply are at present taking place between the Glasgow Corporation and the District Clerk.

INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTIONS) ACTS. 1920-23.

Under the above Acts the following applications were considered and dealt with during the year:—

Applications received.	Certificates granted.	Cases pending.	Applications withdrawn.
21	16	—	5

PROCEEDINGS UNDER THE PUBLIC HEALTH AND OTHER ACTS DURING 1928.

I.—*Nuisances.*

Complaints received, - - - - -	33
Intimations served under Section 19, - - - - -	197
Notices served under Section 20, - - - - -	—
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

II.—*Workshops.*

Inspections, - - - - -	115
Notices served under Section 2 (3) of Factory and Workshop Act, 1901, - - - - -	2

Cases in which legal proceedings were taken, - - -	—
Cases in which legal proceedings were successful, - - -	—

III.—*Tents and Vans.*

Inspections, - - - - -	31
------------------------	----

IV.—*Underground Dwellings.*

Reported to Local Authority, - - - - -	—
Notices to Owners (Section 74), - - - - -	—
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

V.—*Common Lodging-Houses.*

On Register at 31st December, 1928, - - - - -	—
Common Lodging-Houses belonging to Local Authority, - - - - -	—
Inspections between 8 a.m. and 10 p.m., - - - - -	—
Inspections between 10 p.m. and 8 a.m., - - - - -	—
Intimations of Irregularities sent to Keepers, - - - - -	—
Cases of Infectious Disease reported to Medical Officer (Section 97), - - - - -	—
Unregistered Premises dealt with, - - - - -	—
Cases in which legal proceedings were taken (breaches of bye-laws, &c.), - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

VI.—*Houses Let in Lodgings.*

On Register at 31st December, 1928, - - - - -	—
Inspections, - - - - -	—
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

VII.—*Infectious Diseases.*

Visits of Inquiry, &c., - - - - -	385
Patients removed to Hospital, - - - - -	220
Persons removed to House of Reception, - - - - -	—
Notices served under Section 50 (2), { - - - - -	262
Notices served under Section 53 (2), } - - - - -	
Intimations to Education Authorities, Teachers, &c., - - - - -	548
Houses or Premises Disinfected, - - - - -	258
Sets of Clothing, Bedding, &c., Disinfected or Destroyed, - - - - -	251
Cases in which legal proceedings were taken, - - - - -	—
Cases in which legal proceedings were successful, - - - - -	—

VIII.—*Burials.*

Burials undertaken in terms of Section 69,	-	-	-	2
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IX.—*Slaughter-Houses and Offensive Trades.*

Applications under Section 32 for sanction to establish,	-	-	-	-	—
Applications granted,	-	-	-	-	—
Applications under Section 33 for Licence or renewal of					
Licence,	-	-	-	-	2
Applications granted,	-	-	-	-	2
Public Slaughter-Houses (if any) belonging to Local					
Authority,	-	-	-	-	—
Private Slaughter-Houses,	-	-	-	-	2
Unlicensed Slaughter-Houses dealt with,	-	-	-	-	—
Inspections of Slaughter-Houses,	-	-	-	-	208
Inspections of other offensive Trades,	-	-	-	-	—
Number of such other offensive Trades at 31st December,					
1928,	-	-	-	-	—
Cases in which legal proceedings were taken (breaches of					
bye-laws, &c.),	-	-	-	-	—
Cases in which legal proceedings were successful,	-	-	-	-	—

X.—*Unsound Food.*

Inspections under Section 43,	-	-	-	-	—
Seizures of unsound food,	-	-	-	-	—
Animals or carcases or articles of food destroyed with					
owner's consent by or at the instance of the Sanitary					
Inspector,	-	-	-	-	—
Cases in which owners of Unsound Food were prosecuted,	-	-	-	-	—
Convictions in connection with above cases,	-	-	-	-	—

XI.—*Analysis of Samples.*

	Sale of Food and Drugs Acts.	Condensed Milk Regulations.	Dried Milk Regulations.
	Number.	Number.	Number.
Samples procured for analysis,	88	—	—
Certified to be genuine, -	75	—	—
Certified to be adulterated, -	13*	—	—
Cases in which legal proceed-			
ings were taken, -	—	—	—
Cases in which legal proceed-			
ings were successful, -	—	—	—

* Includes 11 test samples.

TABLE XXXVII.—SHOWING NATURE AND NUMBER OF NUISANCES.

NUISANCES.	CUMBERNAULD.					KIRKINTILLOCH.			EAST KILPATRICK.			WEST KILPATRICK.						(A)	(B)	TOTAL OF (A) AND (B).
	Cumbernauld Village.	Condorrat Village.	Auchinstarry Rovs.	Other Parts of Parish.	TOTAL.	Waterside Village.	Other Parts of Parish.	TOTAL.	Bearsden.	Other Parts of Parish.	TOTAL.	Hardgate and Falfley.	Duntocher.	Old Kilpatrick.	Bowling.	Other Parts of Parish.	TOTAL.	TOTAL ABATED.	TOTAL NOT ABATED.	
Ashpits abolished, - - - - -	...	...	...	...	...	...	...	...	...	...	...	6	10	10	9	...	35	35	...	35
Ashpits constructed or Ashbins provided, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4
Ashpits repaired, - - - - -	...	1	...	1	2	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Accumulation of Refuse and other Nuisances removed, -	4	7	...	3	14	1	4	5	3	...	3	...	...	5	...	...	5	27	...	27
Burns cleaned, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Byres and other Premises discontinued or improved, -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Stairs whitewashed or cleaned, - - - - -	...	...	...	...	...	...	...	...	...	...	...	1	3	1	...	...	5	5	...	5
Courts repaired, paved or cleaned, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	3	3	...	3
Damp Houses shut up or repaired, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1
Defective Vents improved, - - - - -	...	...	...	...	...	...	...	...	...	...	...	3	2	...	...	...	5	5	...	5
Defective Windows, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dirty Houses, - - - - -	...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	...	1	2	...	2
Dirty Ashpits and Privies cleaned, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Drains cleaned, - - - - -	1	3	...	2	6	1	...	1	1	...	1	...	5	5	4	...	14	22	...	22
Drains (New) constructed, - - - - -	...	...	...	...	...	...	...	...	11	...	11	...	...	...	...	...	...	11	...	11
Drains repaired, trapped, or ventilated, - - - - -	...	...	...	...	...	1	...	1	...	...	...	...	...	2	2	...	4	5	...	5
Dungsteads constructed or repaired, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eaves Gutters erected or repaired, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	3	3	...	3
Houses unfit for habitation, - - - - -	3	1	...	...	4	...	19	19	...	...	...	35	45	31	...	...	111	135	34	169
Hens, Pigeons, &c., improperly kept, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Overcrowding, - - - - -	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
Pigstyes discontinued, improved, or cleaned, - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Privies abolished, - - - - -	5	9	...	...	14	...	...	...	...	...	...	...	8	4	...	...	12	26	...	26
Privies and Ashpits repaired, - - - - -	1	...	...	1	2	1	...	1	...	...	...	...	...	3	...	3	6	9	...	9
Privies constructed, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sinks fitted up, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sinks untrapped or defective, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...	5	5	...	5
Soil Pipes and Waste Pipes ventilated, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stables discontinued or improved, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Water-closets constructed or repaired, - - - - -	10	12	...	...	22	...	...	...	...	...	...	1	...	1	...	...	2	24	...	24
Water Supply improved, - - - - -	...	...	...	1	1	...	...	...	...	...	...	4	5	...	...	...	9	10	...	10
Water Supply provided, - - - - -	...	...	...	...	...	...	...	...	...	...	...	1	...	...	16	...	17	17	47	64
Walls, Floors, Ceilings, and Roofs of Houses repaired, -	2	1	...	2	5	3	3	6	...	...	...	7	4	5	...	2	18	29	2	31
Wash-houses provided or improved, - - - - -	1	1	...	...	2	1	...	1	...	1	1	1	1	...	...	...	2	5	1	6
Ventilation of Houses improved, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ventilation of Stairs, - - - - -	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nuisances abated, - - - - -	27	37	...	10	74	11	26	37	15	1	16	59	85	76	33	5	258	385	...	...
Nuisances not abated, - - - - -	...	...	...	...	...	2	20	22	...	...	...	...	...	15	...	47	62	...	84	...
TOTAL, - - - - -	27	37	...	10	74	13	46	59	15	1	16	59	85	91	33	52	320	...	...	469

XII.—*Rag Flock Act, 1911.*

Samples procured for analysis,	-	-	-	-	-	—
Certified to conform to Board's standard,	-	-	-	-	-	—
Certified not to conform to Board's standard,	-	-	-	-	-	—
Cases in which legal proceedings were taken,	-	-	-	-	-	—
Cases in which legal proceedings were successful,	-	-	-	-	-	—

XIII.—*Bye-laws.*

Inspections in carrying out Bye-laws relating to:—

(a) Pigstyes,	-	-	-	-	-	-	5
(b) Public Conveyances,	-	-	-	-	-	-	—
(c) Buildings,	-	-	-	-	-	-	936
(d) Cleansing in Special Scavenging Districts,	-	-	-	-	-	-	11,253
(e) Other Sanitary Matters,	-	-	-	-	-	-	1,283

NUISANCES.

An account of the nuisances dealt with throughout the year is recorded in Table XXXVII. The number of intimations and reminders served totalled 197 and 18 respectively.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.

All the farms in the District were inspected at different periods during the year, and a letter was served on 33 farmers, instructing them to have alterations made to premises in order that the requirements of the District Committees' Bye-laws may be complied with. This brings the total number of farms dealt with to 65.

Table XXXVI. gives some idea of the defects which might be classed as structural to which attention has been drawn. On reference to the table it will be seen that the response has been very satisfactory in consideration of all the circumstances. After perusal of the table it might appear to those not acquainted with the seriousness of the situation that the progress has been slow. In view of this I would state that I am entirely satisfied with what has been done, and would like to point out that, considering the state of agriculture generally and the money involved in these alterations, the progress has been exceptionally good.

All the farms in the District were inspected during the afternoon milking to ascertain if the Bye-laws relating to general cleanliness, milking, and handling methods were re-

DAIRY BYE-LAWS. MILK AND DAIRIES (SCOTLAND) ACT, 1914.

TABLE XXXVI.—NUMBER OF FARMS DEALT WITH AND REPAIRS COMPLETED UNDER THE ACT.

PARISH.	Farms.	BYE-LAWS.															
		4	5	6	7	8	9	10	13	14	15	16	17	18	19	20	
Cumbernauld, -	24	21	15	16	4	14	15	17	12	6	6	6	13	18	18	3	
Kirkintilloch, -	10	8	6	6	3	8	9	10	3	4	2	1	5	7	4	3	
East Kilpatrick, -	22	17	16	15	2	11	17	20	19	15	6	7	9	16	11	7	
West Kilpatrick, -	9	9	6	6	3	7	6	8	6	8	2	3	5	10	7	3	
Totals, -	65	55	43	43	12	40	47	55	40	33	16	17	32	51	40	16	
<i>Repairs Completed.</i>																	
Cumbernauld, -	6	5	5	4	1	4	4	4	2	2	2	1	3	4	5	1	
Kirkintilloch, -	1	1	1	—	—	—	1	1	—	—	—	—	—	—	—	—	
East Kilpatrick, -	3	4	2	2	1	2	2	2	4	4	1	1	3	3	2	2	
West Kilpatrick, -	3	2	1	1	—	1	1	2	1	2	—	—	2	2	1	—	
Total Completed, -	13	12	9	7	2	7	8	9	7	8	3	3	8	9	8	3	
Total to be Completed, -	52	43	34	36	10	33	39	46	33	25	13	14	24	42	32	13	

Bye-law No. 4. Walls to be cleaned and wallheads built up.

No. 14. Internal wall surfaces.

15. Floors.

6. Grips and channels.

7. Lofts to be removed.

8. Troughs and trevisses.

9. Lighting.

10. Inlet and outlet ventilation.

13. Dungstead.

16. Shelves.

17. Light and ventilation.

18. Scalding and appliances and repairs.

19. Water supply.

20. Drainage.

Note.—Three dairy farms dealt with are meantime out of commission. A "producer's" licence has been granted in respect of two of the completed farms for the sale of certified and tuberculin-tested milk.

ceiving attention. While the reports on the whole were fairly satisfactory, the farmers' attention in a number of cases had to be drawn to several minor contraventions. Generally speaking, the all-round improvement is quite good, and for the farmers I would say that I have found them, with very few exceptions, always willing to assist me in the administration of the Bye-laws.

The total premises registered for the sale of milk is 144, comprising 111 farms, 11 milkshops, and 22 vans, and the number of cowsheds and cows in each parish are as follows:—

Parish.	Cowsheds.	Cows.
East Kilpatrick, - - -	35	878
West Kilpatrick, - - -	13	284
Cumbernauld, - - -	37	597
Kirkintilloch, - - -	26	461
	<hr/> 111	<hr/> 2220

Licences were granted under the Milk (Special Designation) Order, 1923, to the following dealers in milk:—

Certified milk—James Baird, 3 Douglas Place, Bearsden (retailer).

James Pirie, Laighpark Farm, Bearsden (producer).

Pasteurised milk—Misses M. M. and L. Sillars, 12 New Kirk Square, Bearsden.

Kirkintilloch Co-operative Society, per Wm. Buchanan, Secretary.

FOOD AND DRUGS ACTS, 1875 TO 1907.

PUBLIC HEALTH (PRESERVATIVES IN FOOD) REGULATIONS (SCOTLAND) 1925-1927.

Under the above Acts and Regulations 88 samples were procured at intervals during the year, consisting of 35 "official" and 53 "test" samples.

From the tabulated statement of samples taken it will be seen that 2 "official" and 11 "test" samples did not reach the required standard.

The two official samples were mince, and, as the adulteration in one case was so pronounced, proceedings were instituted against the defender, who was fined the sum of £3. As regards the "test" samples below standard, an official sample was taken or is contemplated at a future date.

Parish.	Record No.	Article.	Percent- age of Milk Fat.	Percent- age of Milk Solids.	Result.
East Kilpatrick, ..	*14E	Sweet milk, ..	3'46	8'52	Genuine
" "	*15E	" "	3'15	8'54	"
" "	*16E	" "	3'36	8'60	"
" "	*14E	Mixture, ..	3'22	8'52	"
" "	*15E				
" "	*16E				
" "	43E	Sweet milk, ...	4'26	8'90	"
		(Certified Grade A)			
" "	44E	Sweet milk, ..	3'14	8'90	"
" "	45E	" "	3'10	8'56	"
" "	46E	" "	3'15	8'81	"
" "	47E	" "	3'17	8'67	"
" "	48E	" "	3'33	8'87	"
" "	49E	" "	3'03	9'18	"
" "	50E	" "	2'76	8'54	Not Genuine
" "	44E	Mixture, ..	3'12	8'80	Genuine
" "	to				
" "	50E	Sweet milk, ..	3'38	8'85	Genuine
" "	63E				
West Kilpatrick, ..	* 3E	" "	3'39	8'75	"
" "	* 4E	" "	4'02	9'08	"
" "	* 5E	" "	3'10	8'58	"
" "	* 6E	" "	3'32	8'86	"
" "	* 7E	" "	3'05	8'71	"
" "	* 8E	" "	3'32	8'95	"
" "	* 9E	" "	3'64	8'86	"
" "	*10E	" "	3'05	8'70	"
" "	*11E	" "	3'36	9'11	"
" "	*12E	" "	3'69	8'91	"
" "	13E	Mince, ...	—	—	Not Genuine
" "	*23E	" "	—	—	"
" "	*24E	" "	—	—	Genuine
" "	25E	" "	—	—	Not Genuine
" "	26E	" "	—	—	Genuine
" "	27E	" "	—	—	"
" "	28E	" "	—	—	"
" "	33E	" "	—	—	Not Genuine
" "	*34E	" "	—	—	"
" "	35E	Margarine, ..	—	—	Genuine
" "	40E	" "	—	—	"
" "	36E	Butter, ..	—	—	"
" "	39E	" "	—	—	"
" "	37E	Coffee, ..	—	—	"
" "	42E	" "	—	—	"
" "	38E	Sugar, ..	—	—	"
" "	41E	" "	—	—	"
Cumbernauld, ..	51E	Sweet milk, ..	3'77	8'69	"
" "	52E	" "	4'24	8'48	"
" "	60E	" "	3'57	8'79	"
" "	61E	" "	3'98	8'81	"
" "	62E	" "	4'12	8'55	"
" "	1E	Cream sandwich,	—	—	"
" "	2E	Fresh butter,	—	—	"
" "	29E	Mince, ..	—	—	Not Genuine
" "	30E	" "	—	—	"
" "	31E	" "	—	—	Genuine
" "	32E	" "	—	—	Not Genuine
" "	56E	Sliced sausage,	—	—	Genuine
" "	71E	Fruit cake, ..	—	—	"
" "	72E	Borax, ...	—	—	"
" "	73E	Pickled onions,	—	—	"
" "	74E	Cream sandwich,	—	—	"
" "	75E	Tea, ...	—	—	"

SHOPS ACT, 1912.

SHOPS (HOURS OF CLOSING) ACT, 1928.

All the shops within the District were inspected during the year under the 1912 Act. With the introduction of the Shops (Hours of Closing) Act, 1928, it was found during inspections made after the closing hour stated in that Act that a number of shopkeepers were not closing their shops as required. A circular was drawn up and posted to the occupiers of 31 shops in the District, after which a considerable improvement was evident.

The closing hour as laid down in the Act of 1928 is 8 p.m. five nights per week and 9 p.m. on Saturday, with the exception that confectioners were allowed to keep open shop until 9 p.m. for five nights and 9.30 on Saturdays. This is where the difficulty of administration arises, as there are so many small multiple shops in the District that it is difficult to get the shopkeepers to understand that they must not sell those articles for the sale of which the man next door has to close his shop at the hour fixed.

The question of registration under the Burgh Police Act is also very misleading to the majority of those registered as regards the closing hours and the goods they are entitled to sell. An endeavour will be made to clear the position at the next Inspection.

HOUSING OF SEASONAL WORKERS.

Applications were received from the farmer and merchant for the housing of seasonal workers at Westerton Farm. Drumchapel, and, on the provision of additional heating and lavatory arrangements, permission was granted to house the workers.

TENTS, VANS, AND SHEDS.

During the months from June to October campers were to be found regularly at Old Kilpatrick. While the Glasgow Fair Holidays were on, a few were to be found camping on the foreshore, and, after being warned regarding the operation of the District Committees' Bye-laws, regular inspections were made to see that the Bye-laws were being observed. An endeavour in this direction was certainly being attempted, but the results were far from satisfactory. In all, 22 persons responsible for camping parties and

SHOPS ACT, 1912.

TABLE XXXVIII.—SUMMARY OF BUSINESSES WITHIN PARISHES IN THE EASTERN DISTRICT.

PARISH.	Bakers.	Butchers.	Chemists.	Cycle and Motor Agents.	Confections, Refreshments, Tobaccos.	Dairies.	Drapers and Clothiers.	Fishmongers.	Fish and Chip Shops.	Grocers.	General Stores.	Hairdressers.	Licensed.	Newsagents.	Shoemakers.	Plumbers.	Totals.
Cumbernauld, -	4	3	...	1	28	...	4	...	2	10	2	2	2	2	1	...	61
Kirkintilloch, -	...	...	...	...	10	...	...	...	1	3	...	...	1	1	...	...	16
East Kilpatrick,	2	4	1	...	22	2	3	2	...	8	1	2	...	1	1	2	51
West Kilpatrick,	3	4	1	1	42	2	3	1	2	15	5	1	14	7	5	1	107
Totals,	9	11	2	2	102	4	10	3	5	36	8	5	17	11	7	3	235

Places of Public Refreshment—52.

equipments were reported, and the erections and the occupants therein are described as follows:—

Place.	Tents.	Occupants. Adults.	Vans.	Occupants. Adults.
Old Kilpatrick,	14	44	11	32
Condorrat,	—	—	1	3
Totals,	14	44	12	35

FACTORIES AND WORKSHOPS.

Under the Acts relating to above, all the workshops and workplaces in the District were inspected, and the attention of occupiers was drawn to any points not in compliance with the Acts or where an improvement in the general conditions could be created.

During Inspections nothing of a serious nature was found and, the remedies required being of a minor nature, only two official notices were served.

An account of the trades and businesses in operation in the District and inspections made are detailed in Table XL.

TABLE XXXIX.—WORKSHOPS (EASTERN DISTRICT).

	Total Number.	Number of Workrooms.	Workshops employing both sexes.	Workshops employing Males only.	Workshops employing Females only.	Total Employees.	Women Employed.	Young Persons and Children Employed.
Bakers, - - -	9	9	1	5	2	24	5	7
Dressmakers, - - -	5	5	...	...	5	5	6	...
Tailors, - - -	3	4	2	1	...	4	2	...
Joiners, Cabinetmakers, Cartwrights, &c., -	9	10	...	10	...	14	...	3
Plumbers, Tinsmiths, -	7	8	...	8	...	25	...	9
Blacksmiths, - - -	9	12	...	11	...	15	...	2
Shoemakers, - - -	9	10	...	9	...	11	...	2
Saddlers, - - -	1	1	...	1	...	1	...	...
Hosiery Knitters, - - -	1	1	...	...	1	5	5	..
Distillers, - - -	1	1	...	1	...	2	...	...
Butchers, - - -	4	6	3	1	...	14	2	9
Other trades, - - -	15	16	1	13	1	25	3	...
Totals, - - -	73	83	7	60	9	145	23	32

TABLE XL.—FACTORY AND WORKSHOPS ACT.—EASTERN DISTRICT.

TRADE OR BUSINESS.	CUMBERNAULD.				KIRKINTILLOCH.		EAST KILPATRICK.		WEST KILPATRICK.						
	Cumbernauld Village.	Condorrat.	Other Parts of Parish.	Total.	Waterside.	Other Parts of Parish.	Total.	Bearsden.	Other Parts of Parish.	Total.	Duntocher and Hardgate.	Old Kilpatrick.	Bowling.	Other Parts of Parish.	Total.
Bakers, - - - - -	2	2	4	4	1	1	1	1	1	1	1	1	1	1	3
Blacksmiths, - - - - -	2	1	1	4	1	1	1	1	2	3	2	1	1	1	2
Bootmakers, - - - - -	3	...	3	3	1	1	1	1	1	1	2	2	1	...	4
Butchers, - - - - -	...	...	...	...	...	...	...	2	1	3	...	...	1	...	1
Distilleries, - - - - -	...	...	...	...	3	...	3	...	...	...	...	...	...	1	1
Dressmakers, - - - - -	...	...	...	...	...	...	...	...	...	...	...	1	...	1	2
Hosiery Knitters, - - - - -	1	...	1	1	...	...	...	4	...	4	1	1	1	...	...
Joiners and Carpenters, - - - - -	2	...	2	2	...	...	...	...	...	...	...	...	1	...	3
Laundries, - - - - -	...	...	3	3	1	1	1	2	1	3	...	1	1	...	...
Motor Engineers, - - - - -	1	...	1	1	...	...	...	4	...	4	1	1	...	...	2
Plumbers, - - - - -	1	...	1	1	...	...	...	...	...	...	1	1	...	...	2
Saddlers, - - - - -	1	...	1	1	...	...	...	...	...	...	...	...	1	...	1
Tailors, - - - - -	2	...	2	2	...	...	...	3	...	3	1	1	...	...	2
Miscellaneous, - - - - -	...	...	1	1	...	...	...	...	...	...	...	...	...	...	6
TOTALS, - - - - -	15	3	4	22	4	2	6	18	4	22	6	9	6	2	23
INSPECTIONS, - - - - -	20	5	8	33	4	2	6	28	4	32	12	18	12	2	44

PRIVATE STREETS AND FOOTWAYS.

The improvement of the following private roads was under consideration during the year, and the position as at 31st December, 1928, is as follows:—

BEARSDEN.

Colquhoun Drive, Bearsden		Brought up to highway standard.
Campbell Drive, „	- -	Brought up to highway standard.
Thorn Drive, „	(Part of),	Transferred to County Road Board.
Lcdcameroch Crescent, Bearsden,	-	Under consideration.
North Erskine Park, Bearsden,	-	„ „
Grange Road, Bearsden,	- -	„ „
West Chapelton Avenue, Bearsden,	-	„ „
Whitehill Road, Bearsden,	- -	„ „
Lochend Road (between Drumchapel Road and Lochend Drive),	-	Repaired.

DUNTOCHER.

Entrancees to Housing Scheme at Duntocher (Davie's Square, Beeches Road),	- - - - -	Repaired.
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WATERSIDE.

Burnbrae Road, Waterside,	- -	Remitted to District Engineer.
Hamburg Road, „	- -	Remitted to District Engineer.
South Albion Street, Waterside,	-	Remitted to District Engineer.
Road Leading to Waterside Farm and Garage,	- - - - -	Remitted to District Engineer.

INSPECTIONS.

The total Inspections made during the year ending 31st December, 1928, are as follows:—

Buildings (New),	- - - - -	912
Buildings (Dangerous),	- - - - -	24
Dairies,	- - - - -	213
Factories and Workshops,	- - - - -	73
Investigation of Infectious Disease,	- - - - -	385

Nuisances, - - - - -	4,393
Pigstyes, - - - - -	5
Seasonal Workers, - - - - -	3
Shops, - - - - -	241
Slaughterhouses, - - - - -	208
Special Drainage Districts, - - - - -	862
Special Lighting Districts, - - - - -	14,305
Special Scavenging Districts, - - - - -	11,253
Tents, Vans, and Sheds, - - - - -	31
Other Matters, <i>i.e.</i> , Inspections under Housing, Rent Restriction Acts, &c., - - - - -	2,100
Total, - - - - -	<u>35,008</u>

I am,

GENTLEMEN,

Your obedient servant,

J. D. M'KENDRICK.

THIRD ANNUAL REPORT OF VETERINARY INSPECTOR.

Municipal Buildings,
Dumbarton, 25th April, 1929.

To the Department of Health for Scotland
and the Eastern District Committee
of the County of Dunbarton.

LADIES AND GENTLEMEN,

I beg to submit herewith Annual Report of the Public Health work carried out by this Department during the year 1928.

Milk and Dairies (Scotland) Acts.—No administrative difficulties were encountered during the year, and in each case the owners afforded every facility to enable a thorough inspection of cattle and premises to be carried out.

Inspections of dairy herds were generally made during the spring and autumn, when the cows were housed. An improvement was observed in the cleanliness of byres, milkhouses, milkers, and cows, and it was evident that a more conscientious effort was being made to produce milk of the highest quality.

The cleansing of byres was in some cases retarded by defective floors, walls, and other structures, and special attention was called to one dairy where there was no facilities for heating water. Repairs were effected in several byres and milkhouses with very satisfactory results, and on one farm electric light was installed in byres and other buildings attached thereto. The introduction of drinking troughs into byres was still continuing throughout the district with beneficial results. In the majority of cases the byres and milkhouses were well kept, but a few essential points, such as the daily cleaning of floors, bedding, gutters, and troughs, and the regular cleaning of walls, roofs, and windows in byres, were again emphasised.

To achieve a certain standard of cleanliness, however, it was pointed out that good buildings were only an aid to the production of a clean milk supply, and that, in spite of the handicap at present of unsuitable buildings, it was possible by careful attention to detail to produce milk of the highest standard.

It is now a regular practice for milkers to wash their hands between each milking and to be neatly garbed in overalls. The cleanliness of utensils was on the whole satisfactory, and it was evident that where hygienic methods were introduced into routine work they soon became habitual, and involve very little extra time or expense.

During the summer and autumn a clean milk competition was carried out under the auspices of the West of Scotland Agricultural College. Twenty farms in the Eastern District took part in the test, which was of a very high standard. In order that all competitors would have the same advantage, two preliminary samples of milk were taken and reported upon, and advice, where necessary, was given regarding reorganisation of methods. Five samples were then taken from each farm for the test, three by the College representatives and two, which only counted for half of the marks of the others, by the farmers themselves. The purity of the milk was judged by determining the bacterial content, the number of coliform bacteria per cubic centimetre, and the fermentation produced on keeping the milk at 100° F. for forty-eight hours. Marks were also given for methods and buildings. Of the twenty competitors, fourteen gained over 1400 marks out of a possible of 2300, and were awarded certificates of merit. This compares favourably with other Counties.

The competition undoubtedly assisted in quickening the interests of all concerned in the production of milk, and, to enable dairymen to maintain the standards attained, the College arranged to receive and test samples of milk at intervals of four or six weeks, as desired, at a reduced fee of 2s. per sample or £1 per year. Those who entered for the test have taken advantage of this scheme, and it is hoped many more will be induced to do likewise.

Inspection of Cows.—In accordance with regulations in the Eastern District, one inspection of cattle in all registered dairies and in premises not registered was carried out during the year, with additional visits as the occasion arose. The inspections were as follows, viz. :—

Number of registered dairies,	-	-	115	
„ „ cows in registered dairies,				2673
„ „ non-registered dairies,	-	6		
„ „ cows in non-registered dairies,				64
			<hr/>	<hr/>
Totals, -	-	-	121	2737

A report of each visit was sent to the Clerk to the Local

Authority for the information of the Medical Officer of Health and the Sanitary Inspector.

Cleanliness, Health, and Diet of Cows.—The general condition, cleanliness, and health of cattle throughout the District was found on an average good. An improvement in the cleanliness of cows was observed in several cases, and, where conditions were unsatisfactory Inspections were continued until they improved. The clipping of tails, quarters, and flanks was in the majority of cases regularly carried out, and the washing of cows' udders prior to milking appeared to be general in all dairies.

The introduction of drinking troughs in byres has undoubtedly proved an important factor in the general health of dairy cows.

In no instance was it found that the diet supplied to the cows was detrimental to the quality of the milk supply.

The number of animals detected with diseased udders during inspections, apart from tuberculosis, was as follows, viz. :—

Atrophy,	-	-	-	-	-	-	115
Mammitis,	-	-	-	-	-	-	4
Induration (non-tuberculous),	-	-	-	-	-	-	19
Eruptions on teats,	-	-	-	-	-	-	13
Total,	-	-	-	-	-	-	151

The diseased animals were removed permanently or temporarily from the milking herds as the cases required, and the milk either destroyed or used for feeding calves or pigs.

Tuberculosis among Dairy Cows.—The number of cows found tuberculous on clinical examination of herds was 13, and these were slaughtered under the Tuberculosis Order of 1925 as follows, viz. :—

Class of Animal.	Tuberculous Emaciation.	Chronic Cough.	Total.	Post-Mortem Examination.	
				Adv.	Not Adv.
Cows in Milk,	1	7	8	5	3
Other Cows,	—	5	5	3	2
	1	12	13	8	5

A slight decrease was noted in the number of animals dealt with under the Tuberculosis Order as compared with the previous year.

Samples of milk taken from five cows with indurated udders were submitted to the Laboratory for examination. No trace of tubercle bacilli was found in either case. Three samples were certified to contain Streptococci, one Staphylococci, and one Diphtheroid bacilli. The Local Authority and the Medical Officer of Health were notified accordingly.

The tuberculin test under section 22 of the Act was not applied to any animals during the year.

Milk (Special Designations) Order (Scotland), 1923.—Under the above Order, the tuberculin tests were applied to one dairy herd in this District, and a licence granted to the owner for the sale of certified milk by the Local Authority. One other herd was inspected and favourably reported upon to the owner, who intends making application to the Local Authority early next year for a licence to sell Grade A "T.T." Milk. The cattle in both herds are of a good quality of dairy cows.

Meat Inspection.—Supervision of the two private slaughter-houses in Cumbernauld was maintained throughout the year. My attendance for examination of carcasses was requested on one occasion by the Sanitary Inspector, who acts as Detention Officer.

I am,

Your obedient servant,

JAMES M'DOUGALL,
Veterinary Inspector.

DISTRICT ENGINEER'S REPORT.

SPECIAL WATER SUPPLY DISTRICTS.

BOWLING SPECIAL WATER SUPPLY DISTRICT.—The water supply within the District continues to give satisfaction, and the works and piping are in good condition.

During the year water supplies were given to Milton Nursery and Littlemill Garage. Both supplies are registered by meter on terms which have received approval. A further supply was also given to the property at Milton belonging to Dr. M'Lachlan's Trustees. Numerous repairs were carried out at the filters, where the pressure is very high, and on the piping system. The latter repairs were almost entirely due to the heavy traffic on the Glasgow-Dumbarton road, and these repairs are not likely to diminish.

Further consideration was also given to the negotiations regarding Auchentorlie Dam and the consumpt of water within the District, but no definite policy has yet been fixed.

It might be noted that early in the year the Water Superintendent was given the tenancy of the Old East Lodge, Bowling, and this arrangement will be of considerable help in securing a still better supervision of the undertaking.

WATERSIDE SPECIAL WATER SUPPLY DISTRICT.—The supply to this District has been satisfactory. The increased consumpt has been given further consideration, and several night tests were carried out, when it was definitely ascertained that no serious leakage existed in the piping system. Thereafter a notice was sent to the consumers, and this method has had the effect of reducing the consumpt to normal proportions.

During the year a supply by meter was granted to the Cadzow Coal Company for their offices at Wester Gartshore Colliery. The pillar wells required considerable attention during the severe frost, and, among other repairs, the control meter house was renovated.

SPECIAL DRAINAGE DISTRICTS.

OLD KILPATRICK SPECIAL DRAINAGE DISTRICT.—The condition of the sewers has been satisfactory during the year. In connection with the drainage of the Slum Clearance Housing

Scheme, new sewers were constructed by Messrs. P. & F. McCallion, Dumbarton, at a cost of £197 5s. 8d.

DUNTOCHER SPECIAL DRAINAGE DISTRICT.—Early in the year difficulty was experienced with the sewer in the Bearsden-Duntocher road, east of Colbreggan Gardens. The repair was apparently necessitated by heavy traffic, and, while the sewer is now satisfactory, observation is still being kept upon its condition.

Further consideration was also given to the question of the drainage from Mount Blow Home, and the proposed construction of a new sewer by the Burgh of Clydebank. The Committee, however, decided to take no action in the matter.

During the year the Glasgow Corporation promoted a Provisional Order dealing with the diversion of the Duntocher Burn, the closing of the dock at Dalnair Sewage Works, and the construction of a new wharf. The County Council opposed the proposal, but the scheme was approved of by the Commissioners.

BEARSDEN SPECIAL DRAINAGE DISTRICT.—Progress was made during the year with the new outfall sewer and other main sewers within the District. The new pumping station at Hillfoot is now in operation, and is working satisfactorily. Regarding the question of the treatment of the sewage, which was referred to in the Report last year, further meetings took place with the Sewage Committee of the Glasgow Corporation, but unfortunately no agreement was reached. The matter was finally settled by the Scottish Board of Health, whose representatives conducted an inquiry during August in Glasgow, and the work proposed by the Committee received the sanction of the Board.

During the year a second extension was made to the sewer in Thorn Drive by Mr. G. K. Davie, Duntocher, at a cost of £118 0s. 5d. The same contractor also laid a sewer in the new switch road at Hillfoot at a cost of £178 5s. 11d. To deal with the drainage of a new biscuit factory at Drumry a sewer was constructed at a cost of £1008 18s. 11d. (exclusive of the cost of surface damages) by Messrs. P. & F. McCallion, Dumbarton. Building developments at Hillfoot and Kessington Road have caused further new sewers to be necessary, and schemes have been approved of with estimated costs respectively of £240 and £1000, the work in each case being practically completed. A new sewer was also laid in the Old Milngavie Road, Canniesburn, by Mr. Robert Anderson, Shettleston, at a cost of £118 11s. 2d., to deal with drainage of a terrace of new houses.

Flooding again took place at Station Road due to heavy rainfall, but it is hoped to overcome this defect when the new outfall sewer is completed. A number of repairs had to be undertaken, and consideration was given to the drainage arrangements at Douglas Park Terrace. The sewer in Camstradden Drive, which was formerly outwith the District, was taken over from the estate at a cost of £318 14s. 10d. The overflow from St. Germain's Loch also received consideration, and it is hoped to have this stream cleaned at an early date.

CONDORRAT SPECIAL DRAINAGE DISTRICT.—The condition of the sewers and works is fairly satisfactory, and only minor repairs have been necessary during the year. The ditch known as the Dalshannon Goat, however, to the cleaning of which the Committee made a contribution, will again require attention at an early date.

Plans and estimates were prepared for a reconstruction of the sewage disposal works due to a projected housing scheme, but the site was eventually rejected.

CUMBERNAULD SPECIAL DRAINAGE DISTRICT.—During the year extensions were made to the boundaries of the Special District chiefly to include the second development of the Housing Scheme. It was also agreed to lay a sewer at an estimated cost of £70 for the drainage of the houses.

Considerable attention was required to be paid to the sewage disposal works during the very severe frost, but generally the sewers and works have given every satisfaction.

DULLATUR SPECIAL DRAINAGE DISTRICT.—There is no special feature to report in connection with this District and, other than a few repairs, the works give satisfaction.

WATERSIDE SPECIAL DRAINAGE DISTRICT.—During the year complaint was made regarding the discharge of the sewer into the Luggie Water during dry weather. To overcome this complaint a scheme is under consideration to lay an intercepting sewer to a point outwith the village, and it is hoped to have the plans and estimate ready at an early date.

PRIVATE STREETS AND FOOTWAYS.

Further consideration was given to the improvement of the streets at Bearsden mentioned in the Report of last year, viz., Ledcameroch Crescent, North Erskine Park, West

Chapelton Avenue, Grange Road, and Whitehill Road, and the subject is still receiving attention. Plans and estimates were prepared in connection with the reconstruction of Burnbrae Road, Hamburg, South Albion Street and Farm Road, Waterside, and negotiations with the proprietors are in progress.

A number of roads at Twechar, and in addition at Bearsden, Colquhoun Drive, Campbell Drive, and Thorn Drive, from the north side of Thorn Road to the centre of North Erskine Park, were added to the list of highways. Any work involved in connection with these roads was carried out by the Road Department.

GENERAL.

CINEMATOGRAPH ACT, 1909.—During the year renewals were granted in respect of the existing licences. The following is a list of the premises:—

- No. 1. Twechar Institute, Twechar.
- No. 2. Woodilee Mental Hospital, Lenzie.
- No. 3. People's Hall, Main Street, Cumbernauld.
- No. 4. Werdna Picture House, Cumbernauld.
- No. 5. Public Hall, Duntocher.

The licence in respect of the Public Hall, Duntocher, was allowed to lapse on the date of renewal, but was granted to another licensee later in the year. Inspections were made at each of the premises, and a reasonable observance of the Regulations was obtained.

FIRE BRIGADES.—The existing arrangements with the Corporation of Glasgow and the Burgh of Clydebank continue to give satisfaction, and visits have been made with the Firemasters to the respective Districts.

During the year the services of the Brigades were required on nine occasions. The following table shows the attendance of the respective Brigades—

Glasgow Fire Brigade, -	-	-	-	5
Clydebank Fire Brigade, -	-	-	-	4
				<hr/>
				9

The fire plugs within the District were examined periodically and new plugs were installed for service in connection with building operations, and improvements were made in

certain areas. A lack of pressure in some of the higher parts of Bearsden was brought to the notice of the Glasgow Corporation.

WATER SUPPLY.—Further consideration was given to the requisition which had been received regarding the formation of a Special Water Supply District at Old Kilpatrick. The District Committee eventually decided not to proceed any further in the matter.

DRAINAGE.—Considerable time was again devoted to the subject of new houses to replace the existing buildings at Croy and Smithstone Rows, and the consequent question of drainage. A number of plans and estimates were prepared, and the matter is still under consideration.